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ABSTRACT

The career education activities in the guide are to be integrated with the school curriculum at the fifth grade level. These activities are designed to help elementary children become more aware of the world of work and may be used selectively according to class needs and capabilities. A career education philosophy, how to use the guide, concepts to develop (grades K-6), and intermediate (grades 4-6) objectives are outlined. Fifth grade career education activities are organized as they relate to seven personal and world-of-work oriented objectives. Units are provided in the subject areas of language arts, social studies, art, math, science, and music. Each unit is keyed to a broad objective, broken down by specific behavioral objectives for each of which there are suggested activities, teaching techniques, and resource materials. A sampling of activities includes individual and group research, mapwork, comparing jobs, reading, discussions, field trips, chemistry experiments, filmstrips, and recordings. Guidelines for field trips, resource people, and interviewing intermediate grades are appended. (Author/NH)

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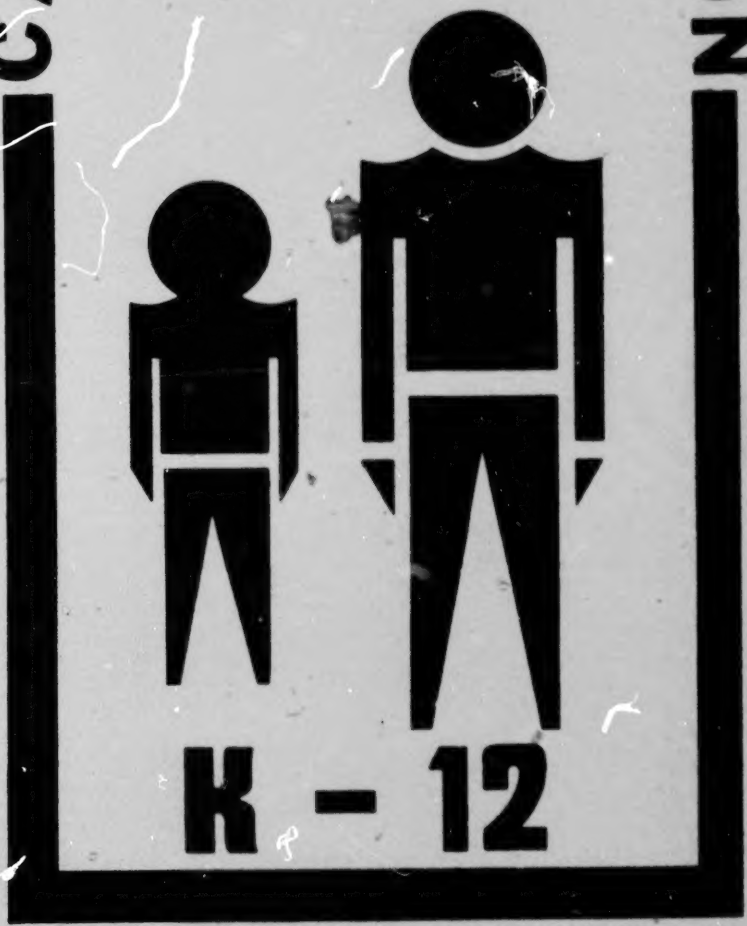
CAREER EDUCATION

NORTH DAKOTA



K - 12

CLASSROOM ACTIVITIES

ELEMENTARY

FIFTH

CE 002 108

CAREER EDUCATION PHILOSOPHY

(Grade 5)

The purpose of education is to develop in the child a positive self concept for his role in a free and changing society.

There are skills which every person must have in order to function successfully in society. The skills of reading, language arts, social studies, health, and the fine arts are important to the child if he is to have a secure and meaningful life.

Career education in the intermediate grades will acquaint the child with the World of Work by exposing him to a variety of experiences in order to make realistic career choices later in life. This total program will help to foster a positive attitude toward the dignity of work in our society.

The total elementary program will serve as a foundation so that the student will be better able to explore career choices at the middle, secondary, vocational, or college levels.

HOW TO USE GUIDE

The career development activities in this manual are referencing materials that are designed to be integrated with the school curriculum. These activities are to be incorporated to help elementary children become more aware of the World of Work. In planning for further education and future employment too many young students are unprepared to choose a field in which they would have interest, ability and aptitude.

Teachers should not feel that you need to use all activities shown, rather pick and choose ideas that meet the needs of your students. You are not restricted to use only resource materials listed in the activity. Additional materials may be obtained locally in addition to the comprehensive list in Appendix F.

The Table of Contents follows which summarizes activities found under the basic subject headings. Many of the activities are integrated with other subject areas.

Information contained in the appendices include:

1. Appendix A
   a. Bismarck filmstrip library list I-87 to I-98 (found only in master copy in principal's office)
2. Appendix B
   a. Resource people guideline I-100
   b. Form letter I-101
   c. Follow-up I-102
3. Appendix C
   a. Field trip I-104
      1) Preliminary letter to field host I-104a
      2) Student evaluation sheet I-104b
4. Appendix D
   a. Address of supplies of resource materials I-106 thru I-109 (found only in master copy in principal's office)
5. Appendix E
   a. Interviewing guideline I-111
   b. Questionnaire I-112 thru I-113
6. Appendix F
   a. Material available at State Board for Vocational Education, Exemplary Project, 900 East Boulevard, Bismarck, ND 58501

We recommend that teachers review the material to develop awareness of the activities and their application in their classroom.

CONCEPTS TO DEVELOP (GRADES K-6)

1. Specialization leads to interdependency
2. Geographical location determines kinds of work found there in.
3. Individuals live in a particular geographical location due to the nature of their work.
4. People need to speak well in their work.
5. People need to be able to listen in their work.
6. People need to be able to write in their work.
7. Reading helps people in their careers.
8. The ability to communicate effectively helps a person work well with other people.
9. Understanding of mathematics helps people in their work.
10. Money is the chief form of barter in our society.
11. An understanding of science helps people in their work.
12. Having a scientific attitude (problem solving) helps people in their work.
13. Advances in science change work.
14. Advances in science have altered the occupations that produce goods and occupations that produce services.
15. Some people work to help us stay healthy.
16. Some people specialize in their work to keep us healthy.
17. There are many jobs associated with physical education.
18. Music, Art, and drama give people pleasure.
19. Some people have occupations in fine arts to give us enjoyment.
20. Careers in the fine arts often require special training.
21. There are many jobs associated with fine arts.
22. Self understanding is important in making career decisions.
23. Leisure time activities affect career choice.
24. Individuals differ in abilities, interests, attitudes and values.
25. A society needs both a producer of goods and producer of services.

CONCEPTS OF DEVELOP (Grades K-6) Cont.

26. Supply and demand of goods influences the kinds of workers found in the community.

27. People work for various rewards.

28. Math concepts are necessary in communicating.

29. A healthy body is essential to a productive worker.

30. Many people have special training for work.

31. Recreational activities expand interests.

INTERMEDIATE (GRADES 4-6) BROAD OBJECTIVES

I. To develop a positive self-concept that will lead to future self-fulfillment in a vocation.

   A. To help students:

      1. To respect and accept self and others
      2. To be dependable
      3. To be responsible
      4. To be cooperative
      5. To enjoy work and play
      6. To make wise decisions and choices.

II. To develop a wide and varied interest that will open up an expanded basis for vocational choice.

III. To give students an opportunity to express goals and aspirations.

IV. To develop a positive attitude toward work and preparation for work.

V. To present appropriate occupational information using a broad introduction of occupations throughout the world.

VI. To provide more specific observational experience about the world of work.

VII. To make school subjects more meaningful.

VIII. To develop and foster a positive attitude toward the value of fine art.

IX. To impress upon student that a healthy body and mind is essential to a productive worker.

X. To develop skills basic to living a full and meaningful life.

FIFTH GRADE TABLE OF CONTENTS
Listed According to Subject Areas

Language Arts

I-1 Character Building
I-2 Hobbies
I-3 Creative Writing
I-4 Projects and Research
I-5 Industry
I-6 Interviewing
I-7 Correlated Language Arts Discipline
I-8 Reading - Biography

Social Studies

I-9 Government Occupations
I-10 Introduction to U. S.
I-11 New England Mapwork and Projects
I-13 Games and Mapwork
I-14 Games Mapping, Exhibit
I-15 Mapwork
I-16 Job Visitation
I-17 Projects and Floats
I-18 Projects and Discussion
I-19 Job Comparison
I-20 Field Trip Discussion
I-21 Projects - Industries and Related Occupations
I-22 Elections and Government
I-23 South American Map Activity

Art

I-24 The West

Other art related activites can be found on the following pages:
I-11, I-4, I-14, I-17

Math

I-12 Graphing
I-25 Monetary
I-26 Usability on Jobs
I-27 Math Concepts
I-28 Budgeting
I-29 Athletic Activities

Science

I-30 Science Related Occupations
I-31 Sound Occupations
I-32 Jet Propulsion Occupations
I-33 Aeronautics Occupations
I-34 Chemistry Occupations
I-35 Electricity Occupations
I-36 Nutrition Occupations

Music

Songs listed in Resource Materials of the following pages:

I-1	Family Appreciation
I-2	Hobbies
I-9	Patriotic Songs
I-11	Eastern Seabord Songs
I-13	Eastern Work Songs
I-3	Southern Songs
I-14	Central State Songs
I-4	West Coast Songs
I-15	Alaska and Hawaii
I-18	"The City Blues"
I-25	Food and Drink Songs
I-20	Western Trail Songs
I-31	Electronic Music

FIFTH GRADE TABLE OF CONTENTS
Listed According to Broad Objectives

I. To Develop a Positive Self-Concept That Will Lead to Future Self-Fulfillment in a Vocation

Pg. 1 Language Arts (character building)
2 Language Arts (hobbies)

II. To Develop a Wide and Varied Interest That Will Open Up an Expanded Basis for Vocational Choice

Pg. 9 Social Studies (government occupations)
12 Math (graphing)
10 Social Studies(introduction to U. S.)
15 Math (comparing map areas)
13 Social Studies (game and mapwork)
3 Language Arts (creative and informational writing)
14 Social Studies (game mapping and exhibit)
4 Language Arts (projects and research)
15 Social Studies (mapwork)
5 Questions on Industry

III. To Give Students an Opportunity to Express Goals and Aspirations

Pg. 3 Language Arts (skit and creative writing)

IV. To Develop a Positive Attitude Toward Work and Preparation for Work

Pg. 16 Social Studies (job visitation)

V. To Present Appropriate Occupational Information Using a Broad Introduction of Occupations Throughout the World

Pg. 17 Social Studies (projects - floats)
18 Social Studies (project discussion)
19 Social Studies (job comparison and discussion)

VI. To Provide More Specific Observational Experience About the World of Work

Pg. 25 Math (monetary)
. 20 Social Studies (field trip discussion)

VII. To Make School Subjects More Meaningful

Pg. 6 Language Arts (interviewing)
26 Math (interview)
27 Math (math concepts
30 Science (Science enrighment activities)
31 Sound Occupations
•32 Jet Propulsion occupations
33 Aeronautics Occupations
34 Chemistry Occupations
35 Electricity Occupations
36 Nutrition Occupations

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop positive attitudes toward the world of work

CONCEPT: The ability to communicate effectively helps a person work well with other people.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student can list four ways children show parents that they love and appreciate them.

SUGGESTED SUBJECT AREA Language arts

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Use filmstrip Working Together in the Family and accompanying record. Before starting the record show frame that gives purpose of this filmstrip - teacher or one of the students could read it aloud from the screen. 2. Show frame that lists things to look for - someone also could read this. 3. Use the discussion questions that are recorded in bands at the end of the 33 1/3 r.p.m. narration to stimulate group discussion and participation. 4. Discuss ways in which cooperative working helps the family have leisure time.	Discuss what parents do for them. Ask students if they show love and appreciation for what their parents do for them.	Filmstrip: * Working Together in the Family and accompanying record. Songs: True Grit - Home Sweet Home Oh My PA PA - I Want a Girl When your Smiling - "A Little song of Life Mastering Music, A B C p. 196 (1970) "Someday" Making Music Your Own Silver Burdett, 1971 pp. 224-225 Film: * Late for Dinner: Was Dawn Right? *The Lemonade Stand (14 min) 2966 * Rules and Law (15 min) B/W 592 *Don't Get Angry (12 Min) Brittanica Films 695

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop wide and varied interests that will open up an expanded basis for vocational choice

CONCEPT: A. Specialization Leads to Interdependency B. Recreational Activities Expand Interests

SPECIFIC BEHAVIORAL OBJECTIVE: Each student is able to tell about or show one or more hobbies that he has now or would like to pursue.

SUGGESTED SUBJECT AREA Language Arts

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Children that have hobbies tell how and why they got interested in a particular hobby.	1. Discuss: Why we have hobbies?	Filmstrip: What Do You Like to Do? SVE, 1345 Diversey Parkway Chicago, Ill 60614
2. Students bring hobbies to school.	2. Is there a reason for having hobbies?	
3. Students and teacher do research on hobbies that turned into careers.	3. Can hobbies turn into an occupation? How? Examples.	Songs: "Canoe Round" Making Music Your Own Silver Burdett p. 103 "Take Me Out to the Ball Game." "Hiking" Music For Young American- ABC Bk. 6 Biking Songs Chattanooga Shoe Shine Boy "Jazz Man" Mastering Music ABC p.206
4. Have some adult come to school and explain their hobby.	4. Can any of you see that your hobby may turn into a career?	

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop a wide and varied interest that will open up an expanded basis for vocational choice.

CONCEPT: People Need to Be Able to Write in Their Work.
SPECIFIC BEHAVIORAL OBJECTIVE: Each student will write a story or poem about the southern states including criteria about employment in those states in their writing.

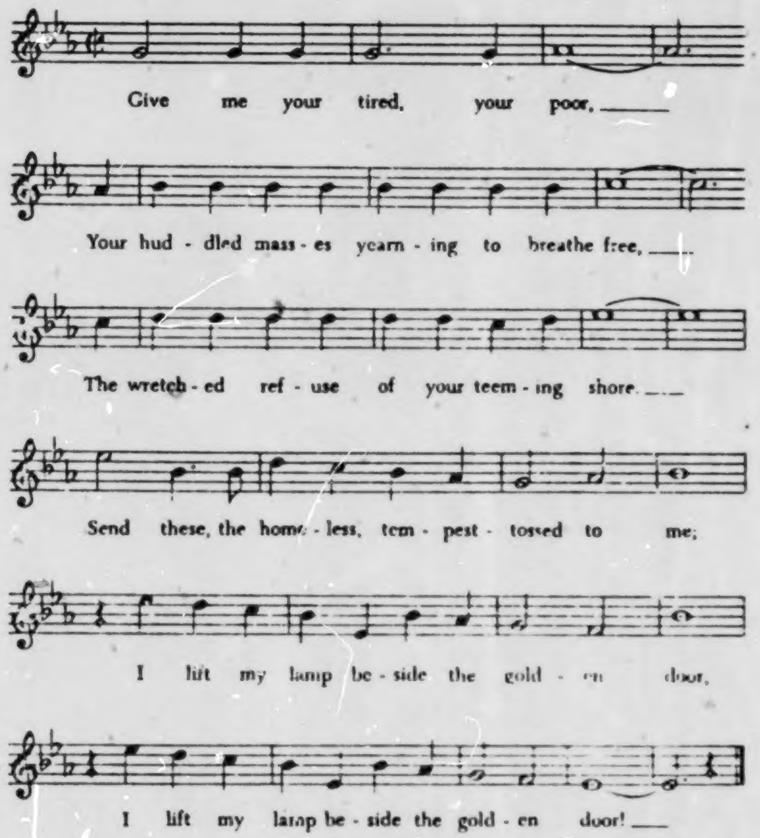
SUGGESTED SUBJECT AREA Language Arts
SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Creative and informational writing.	1. Write letters to the southern states to get information concerning that section of our country (write to Chambers of Commerce, State Capitals, State Employment Agencies, etc.) 2. Write stories or poems about the southern states. This activity should enhance anticipation for the incoming material listed in technique number one	Books: *Men At Work in the South, Henry B Lent G. P. Putnam's Sons, New York 1957 Filmstrips: Bismarck public schools 306 Old South (then and now) 302 Then and Now in the Cotton Belt 303 Then and Now Along the Lower Mississi 307 Then and Now In Florida 882 Gulf Coast 887 Southeast 888 Southwest 304 Then and Now in Texas Films : * Southeastern States (11 min) EBE * Planter of Colonial Virginia EBE (11 min * People Along the Mississippi EBE (22 min * Our Shrinking World - Jet Pilot EBE 17 Songs: Oh Susannah - Davy Crocket Battle of New Orleans - Shennandoah Deep in the Heart of Texas Way Down Yonder in New Orleans.

SUGGESTED CORRELATION FOR THIS ACTIVITY:

Give Me Your Tired, Your Poor

Music by Irving Berlin
Words from the poem "The New Colossus"
by Emma Lazarus


Give me your tired, your poor, ___
Your hud - dled mass - es yearn - ing to breathe free, ___
The wretch - ed ref - use of your teem - ing shore. ___
Send these, the home - less, tem - pest - tossed to me;
I lift my lamp be - side the gold - en door,
I lift my lamp be - side the gold - en door! ___

Copyright 1949 by Irving Berlin. Used by permission of Irving Berlin Music Corporation.

Record 1 Side A Band 7. VOICE: soprano.
ACCOMPANIMENT: string quartet, harp.
FORM: Introduction, *4 meas.*; Vocal; Coda, *3 meas.*

Key: E♭ Starting Tone: G (3)
Meter: ¢ $\binom{2}{2}$
Piano accompaniment on page 220

Give Me Your Tired, Your Poor

- **ABOUT THE SONG**: The words of this song are found on the Statue of Liberty in New York Harbor. Review with the class information about the statue, its source, purpose, and meaning, or assign this as a research topic for report and discussion. Study the entire poem and ask the class to discuss its meaning. Memorize it for choral speaking or for individual recitation.

The New Colossus

by Emma Lazarus

Not like the brazen giant of Greek fame,
With conquering limbs astride from land to land;
Here at our sea-washed, sunset gates shall stand
A mighty woman with a torch, whose flame
Is the imprisoned lightning, and her name
Mother of Exiles. From her beacon-hand
Glows world-wide welcome; her mild eyes command
The air-bridged harbor that twin cities frame.
"Keep, ancient lands, your storied pomp!" cries she
With silent lips. "Give me your tired, your poor,
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore.
Send these, the homeless, tempest-tossed to me,
I lift my lamp beside the golden door!"

- **RHYTHM**: Discuss with the class the symbol C for common time or $\frac{4}{4}$ meter and the symbol ¢ for cut time. When the cut-time symbol appears, the rhythm is sung or played with two beats to the measure, the half note receiving one beat. Help the class discover that in this song two quarter notes sound with one beat, and the whole note sounds with two beats. Ask the class to tap the rhythm of the melody as you tap the steady two beats per measure

MELODY: Point out the ascending scale from G to E♭ in the first three phrases of the song. Notice the feeling of urgency derived from the ascending tones as they build toward the climax phrase (phrase four). Listen to the recording and notice the expressive way the climax phrase is sung.

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop a wide and varied interest that will open up an expanded basis for vocational choice.

CONCEPT: People need to be able to write in their work.

SPECIFIC BEHAVIORAL OBJECTIVE: To demonstrate understanding of conservation each student will develop an ecology project.

SUGGESTED SUBJECT AREA Language Arts

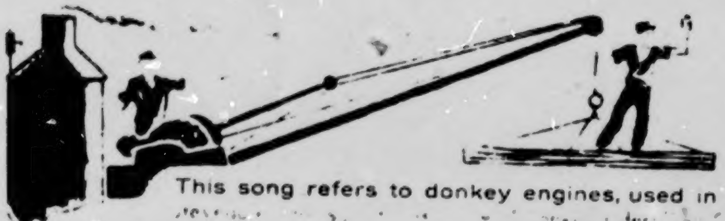
SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Bulletin Board	1. Have children collect and arrange on the bulletin board some pictures on certain industries found in the West.	Books: * Men at Work on the West Coast Henry B Lent, G. P. Putnam's Sons New York: 1959
Ecology project	2. Each child will initiate his own ecology project such as: posters and research on different types of pollution. Local clean-up projects (either individual or groups)	Any social studies text or other reference material.
Research topics	3. Do research on various crops or industries such as peanuts, cranberries, cotton, oyster industry, dairying, raisens, etc. Report to the class or make a display of the findings.	Filmstrips: Bismarck Public Schools 271 Story of West Coast Lumber 24, 25 Rocky Mountains and Plateaus 885 Pacific Northwest 886 Rocky Mountains Area 317 Then and Now In Pacific Northwest 11 Paper In the Making 318 Then and Now in the Rocky Mountains 314 Then and Now in California 296 Gold Rush - California (with record) 313 Then and Now Between Western Mountains (continued)

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
		Films: * The Interior West - The Land Nobody Wanted (20 min) EBE * Copper - Mining and Smelting (11 min) EBE * Chicano - From the Southwest (15 min) EBE * Making the Desert Green (16 min) EBE * The Pacific West (24 Min) EBE * Our Changing Way of Life - The Lumberm (15 min) EBE Songs: This Land is your Land - El Camino Real Seattle- I Left My Heart in San Franciso Sweet Betsy From Pike - Cool Water Colorado Trail- Casey Jones Donkey Riding - San Franciso (attached) Roll On Columbia - Experiencing Music Bk 5. A. B. C. 1970 p. 118



This song refers to donkey engines, used in loading boats with lumber.
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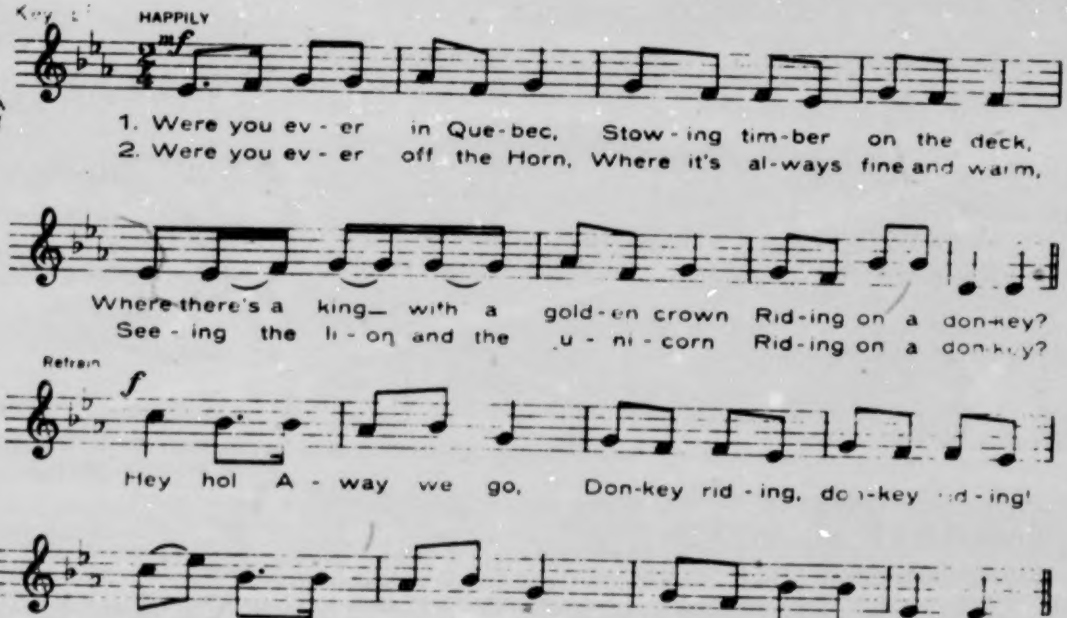
Donkey Riding

Canadian Sea Chantey


HAPPILY
mf
1. Were you ev - er in Que-bec, Stow - ing tim-ber on the deck,
2. Were you ev - er off the Horn, Where it's al-ways fine and warm,
Where there's a king— with a gold-en crown Rid-ing on a don-key?
See - ing the li - on and the u - ni - corn Rid-ing on a don-key?
Refrain
f
Hey ho! A - way we go, Don-key rid - ing, don-key rid-ing!
Hey— ho! A - way we go, Rid-ing on a don - key!

3. Have you sailed to Cardiff Bay,
Where the folks all shout, "Hooray!
Here comes John with six months' pay,
Riding on a donkey"?

4. Queen, she ups and names the day
King, he gives me six months' pay,
Old Sam Salt will sa[illegible] away
Riding on a donkey

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To give students an opportunity to express goals and aspirations

SPECIFIC BEHAVIORAL OBJECTIVE: Each student will pantomine an occupation and write a job description of same.

SUGGESTED SUBJECT AREA Language Arts

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Skit 2. Pantomine 3. Creative writing	1. Discuss various types of occupations. 2. Show selected filmstrips listed in resource materials. 3. Thermofax accompanying occupational list and distribute to youngsters. Motivate student interest in the list by presenting the pantomine game as described in technique No. 4. 4. Have each child in class select an occupation and express this occupation through pantomine. They can bring occupational tools, etc. to assist themselves in the pantomine. The class should be divided into three equal groups with a student supervisor who knows the answers to each pantomine. As soon as a student thinks he knows the answer to a pantomine, he will write the occupation and show it to the student supervisor. If the answer is correct, the supervisor will notify the teacher who will time the activity. Each student will have a maximum of	*Occupational Outloook Handbook Labor Department Magazines Newspaper Encyclopedias Occupational filmstrips with records by Edu-Craft: 201 What Else Do Fathers Do? 202 Just What Do Mothers Do? 203 It's in Your Hands 204 The Electrical Workers 205 The Gas and Oil Workers 206 The Telephone Workers 207 Getting the Goods to Users 208 A Matter of Business! 209 It's the Growing Things 210 At Your Service 211 Raw Steel to Rolling Wheels 212 Food---Shelter---Clothing 213 Helping the Healing Hands

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS

one minute to give the pantomine. Rotate pantomine presentation by groups. Suggested point system for pantomine game: 0-15 sec. - 4 pts. 16-30 sec. - 3 pts., 31-45 sec. - 2 pts., 46-60 sec. - 1 pt.

Group	Group	Group
yI	yIIz	yIII

Note: *Group giving pantomine is not eligible to express answers.

x represents student present pantomine
y student group supervisor
z little Johnny in Group II has correctly written occupation of x's pantomine. y notifies teacher who notes time elapsed as 14 seconds. Both Group II and III have earned four points. (Points are awarded to both the pantominer's group and the group guessing correctly.)

5. Each student will select an occupation favorable to himself. He will express why he chose that occupation and what he hopes to achieve in that field.

WHAT'S MY JOB?

How close can you come to describing the job that these workers perform? The answers are on the following pages.

An abrasive grader

An acid filler

An aerospace engineer

An agronomist

An air-hammer operator

An anthropologist

An automotive engineer

A bag machine operator

A barker operator

A biochemist

A buyer

A cartographer

A cinderman

A civil engineer

A conservation officer

A dispatcher

A draftsman

An economist

An electronic technician

A forester aid

A foundry worker

A gang sawyer

A geologist

A glazier

A hammersmith

A hand assembler

A horticulturist

A hygienist

A keypunch operator

A landscape architect

A lather

A linguist

A longshoreman

A machinist

A metallurgist

A meteorologist

A millwright

An oceanographer

A pipefitter

A sheetmetal worker

A tannery gummer

A tool and die maker

There are over 30,000 different kinds of workers in the United States.

You will probably be one of them someday.

ANSWERS TO "WHAT'S MY JOB?

5c

An abrasive grader operates a mill to grind emery, rouge, and other abrasives.

An acid filler fills storage battery cells with sulfuric acid solutions to prepare them for charging.

An aerospace engineer does research and develops flight equipment for use in air and outer-space.

An agronomist experiments for new and better ways to grow crops.

An air-hammer operator breaks concrete, stone, or other pavement with an air-hammer.

An anthropologist studies the evolution and races of men and their cultures.

An automotive engineer designs and oversees construction of automobiles, trucks, and other automotive equipment.

A bag machine operator runs a machine that cuts, folds, and seals paper and plastic bags.

A barker operator runs a machine to remove the bark from a tree before it is processed in a saw mill or paper making plant.

A biochemist studies the chemical reactions in living things (plants and animals).

A buyer purchases merchandise to be used or re-sold by large companies.

A cartographer draws maps of cities, countries, states, and other areas showing many of their features.

A cinderman removes cinders from furnaces in some large factories and iron melting plants.

A civil engineer plans, designs, and oversees construction of structures such as roads, airports, dams, and bridges.

A conservation officer patrols and area to prevent game law violations and to help preserve property and wildlife.

A dispatcher receives radio messages and sends instructions for airplanes to land, police cars to report to a crime, repairmen to go to a site of trouble, and many other things.

A draftsman makes detailed drawings of items to be manufactured or of structures to be constructed.

An economist aids in the solution of money problems by studying costs and making reports.

An electronic technician draws and assembles models for making items to be run by electricity.

A forester aid works alone or with a crew to protect and wisely use forest land.

A foundry worker works with melting metal, pouring it into molds, and otherwise preparing it for use.

A gang sawyer operates a gang saw to cut such items as lumber or large blocks of stone.

A geologist studies the earth's crust and the ocean bottom and prepares reports on what he finds.

A glazier installs glass windows in stores, glass doors in buildings, mirrors on walls, and glass in table tops.

A hammersmith repairs defects in such silver objects as trays, teapots, and bowls.

A hand assembler fastens together parts of an item as they pass by on an assembly line.

A horticulturist experiments with plants and plant products to find better means of production, storing, processing, and shipping.

A hygienist studies our environment and makes reports on what is harmful to our health and suggests ways to correct harmful things.

A keypunch operator uses a machine similar to a typewriter to punch information on cards to be used in computers.

A landscape architect plans land for use in parks, airports, highways, and sometimes even homes.

A lather fastens wood or metal lathes to walls or ceilings to provide support for plaster.

A linguist is a person skilled in translating foreign languages.

A longshoreman operates equipment to move cargo about on docks and on and off ships.

A machinist operates equipment to make or repair metal objects such as tools, machines, and other things with metal parts.

A metallurgist studies metals and reports various things about them.

A meteorologist studies our atmosphere and reports and forecasts weather.

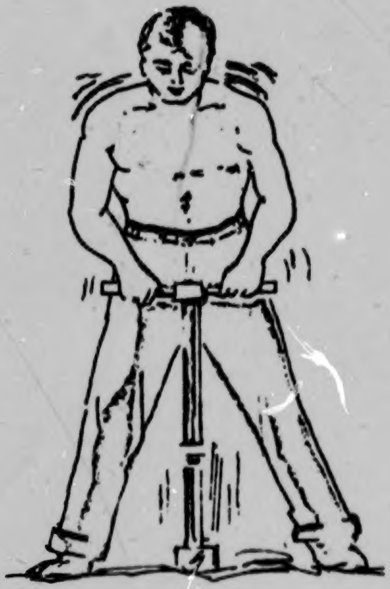
A millwright uses hand and power tools to install machinery and equipment in industrial plants.

An oceanographer studies the physical aspects of the ocean and the movement of the sea.

A pipefitter installs and maintains pipe systems for such purposes as heating and cooling metal.

A tannery gummer spreads a solution on leather to finish or waterproof it.

A tool and die maker runs machines to fit and assemble parts for metal equipment.



Air-Hammer operator

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To make school subjects more meaningful

CONCEPT: Reading helps people in their careers.

SPECIFIC BEHAVIORAL OBJECTIVE: Students will be able to list three ways that reading is useful to him now and three ways that it will be useful in later life.

SUGGESTED SUBJECT AREA Language Arts

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Have students question parents or other adult on how they use reading at work and at home.	Discuss: 1. How do you as a student use reading in your everyday life? 2. How do you think you will use reading later in life? 3. How do you think we could find out how adults use reading at home and at work? 4. Do you think that people on television need to read in their work? 5. Is there a place for "fun reading" in our lives? 6. Could we drive without using reading? 7. Have you had to read instructions at any time? When?	1. Parents who will come to school 2. Slides or filmstrips that have captio 3. Newspapers 4. Instructions for assembling something Films: * Library Story (15 min) 578 EBE * Newspaper Story (17 min) 451 B/W EBE

SUGGESTED CORRELATION FOR THIS ACTIVITY:

Compliments of Lyle Evenson's collection
Supervisor of Vocational Guidance

SIGN PAINTER'S CUP

1. Use a sheet of light cardboard about 5" by 7" or larger.

2. Fold the sheet into three equal parts vertically and then open it out again.

3. Fold the sheet into three equal parts horizontally and then open it out again.

4. Hold the sheet along its long left edge at the upper horizontal fold and with the right hand grasp the left vertical fold along the top edge of the sheet.

5. Bring the horizontal fold grasped by the left hand up and around so that it lies on top of the upper third of the left vertical fold. This will create a diagonal fold in the upper left section of the sheet; this fold must go through the intersection of the upper horizontal fold and the left vertical fold. Open the sheet out again.

5. Repeat #4 and #5 on the right side of the sheet; hold the paper with the right hand grasping the right edge of the sheet at the upper horizontal fold, and grasp with the left hand the upper end of the right vertical fold. Again, the diagonal fold created must go through the intersection of the upper horizontal fold and the right vertical fold. Open the sheet out again.

7. Now reverse the sheet top to bottom and repeat #4, #5, and #6.

8. Hold the sheet at each end of the upper horizontal fold, and bend each side up from the center section. At the same time, make the upper horizontal section begin to fold upward. The upper left and right corners of the sheet will tend to fold back behind the upper center section. You will notice that part of the sheet extends above the other. Bend this extension back and down tightly. This will "lock" the sheet into its new shape. Do NOT unfold.

9. Again reverse the sheet top to bottom and repeat #8.

10. You should now have a rectangular-shaped cup which will provide opportunity to contain a delightful liquid refreshment you desire to imbibe.

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To provide more specific observational experience about the world of work and to work and to make school subjects more meaningful

SPECIFIC BEHAVIORAL OBJECTIVE: To make the student aware of three occupations he would be suited for.

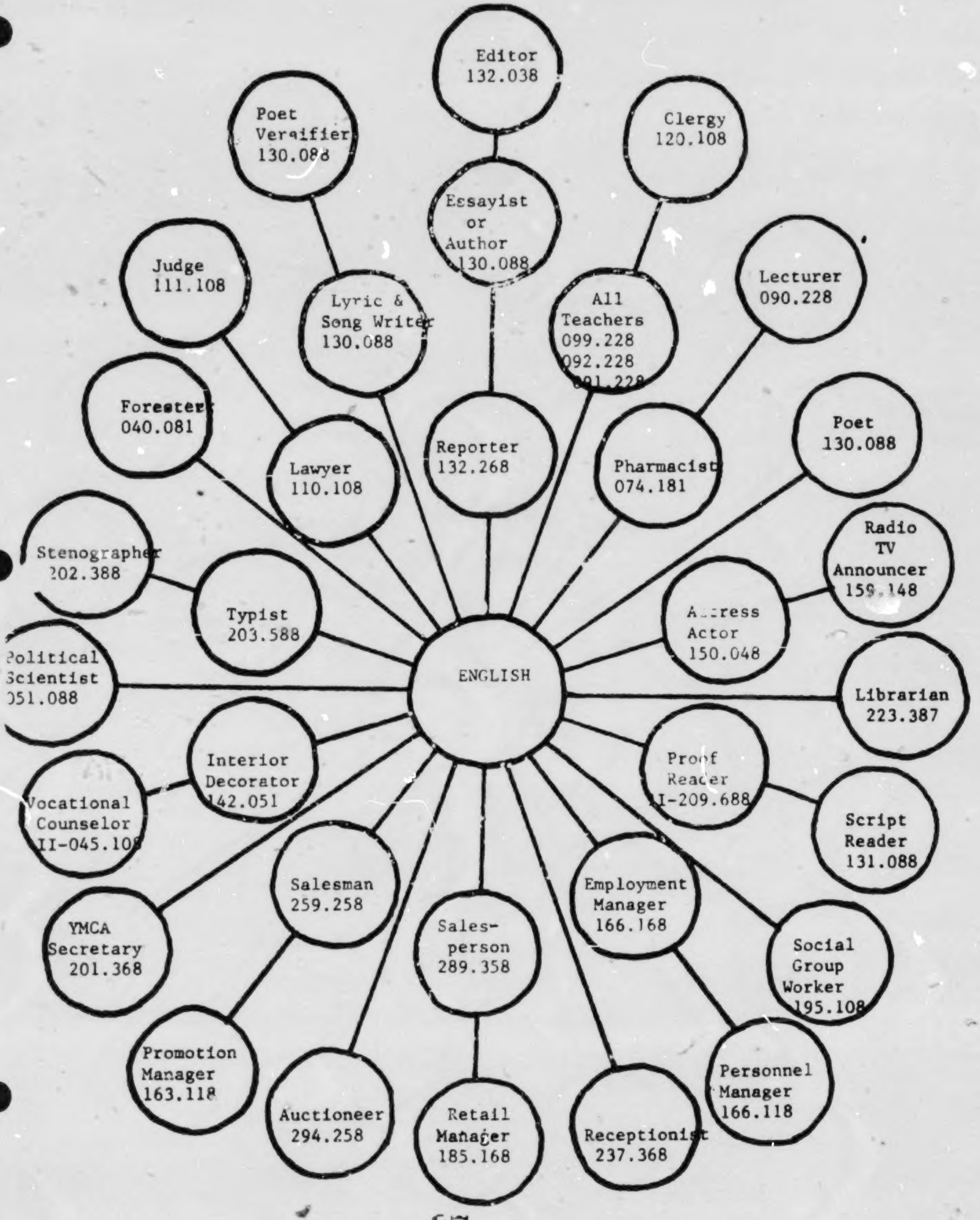
SUGGESTED SUBJECT AREA (All areas) Language Arts

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Activities listed on first page of booklet.	1. Teachers thermofax and compile the attached sheets to be given to each student. 2. Teachers use own discretion on time allocated and amount of work to be completed in the booklet. Note* - Spelling list allows four different levels of ability * - Cluster page, "Occupations Related to Interest and Ability in English." Should be mimeographed on construction paper for cover.	1. Magazine pictures 2. Filmstrips: a) What Good Is School? SVE b) What Is a Job? A-778-3

SUGGESTED CORRELATION FOR THIS ACTIVITY:

SOME OCCUPATIONS RELATED TO INTEREST AND ABILITY IN ENGLISH


Editor 132.038
Poet Versifier 130.088
Clergy 120.108
Essayist or Author 130.088
Judge 111.108
Lyric & Song Writer 130.088
All Teachers 099.228 092.228 091.228
Lecturer 090.228
Forester 040.081
Lawyer 110.108
Reporter 132.268
Pharmacist 074.181
Poet 130.088
Stenographer 202.388
Typist 203.588
Radio TV Announcer 159.148
Actress Actor 150.048
Political Scientist 051.088
ENGLISH
Librarian 223.387
Interior Decorator 142.051
Vocational Counselor II-045.108
Proof Reader II-209.688
Script Reader 131.088
Salesman 259.258
Employment Manager 166.168
YMCA Secretary 201.368
Sales-person 289.358
Social Group Worker 195.108
Promotion Manager 163.118
Personnel Manager 166.118
Auctioneer 294.258
Retail Manager 185.168
Receptionist 237.368

WORLD OF WORK - LANGUAGE UNIT

7b

NAME ______________________________

1. Questionnaire - What do I know about me?
2. Oral sharing of hobby - hobbies often lead to lifetime jobs.
3. Interview your parents about their job.
4. Write a short report on the work of a famous person.
5. Fishbowl discussion. Be prepared to discuss why education is important to you in your future job and what type of work you are interested in.
6. Job listings - Being able to communicate effectively helps people work well with others. Speaking, writing, listening and reading are important for many jobs. List at least 5 for each one.
7. Summary - Write a short summary of a biography book you have read. List the title, author, and the type of work the person did.
8. Write clues - Write 5 clues about an occupation to use in playing "What's My Line?" Suggested ideas for clues:
    - (a) Do you work inside or outside?
    - (b) Do you wear a uniform?
    - (c) Do you need any special training? Or special equipment?
    - (d) Is it a man's or woman's job?
    - (e) Where do you work?
    - (f) Do you need a college education?
9. Complete a job application form.
10. Pantomine a worker or do a group skit on occupations.
11. Write several paragraphs telling what you want to be when you grow up? What type of training will be necessary? Why do you want to do this?
12. Bring magazine pictures and mount on colored paper or illustrate one of the jobs that correlate with language. These will be used on our bulletin board.

WHAT DO I KNOW ABOUT ME?

7c

1. What I like to do: ______

2. The hobbies I have or would like to have: ______

3. The clubs I belong to: ______

4. Some clubs or things that I have done that I did not enjoy: ______

5. What I most often do in my spare time: ______

6. Contests or competitions I have entered: ______

7. What subjects I like best in school: ______

8. The subjects I do not enjoy in school: ______

9. What sports or games I like best: ______

10. What kind of person I like best to be with: ______

11. Do I like to read in my spare time? ______

12. What kind of jobs do I like to do best now? ______

13. What kind of work would I like to do in the future? ______

14. Do I spend most of my free time indoors or outdoors? ______

QUESTIONNAIRE

TO

INTERVIEW PARENTS ABOUT THEIR WORK

7d

1. What is your job?

____

2. What do you do at your job?

____

3. What do you need to know to do this type of work?

____

4. Do you work indoors or out?

____

5. Must you be strong to do this type of work?

____

6. Is there special training required?

____

7. Are there opportunities for advancement?

____

8. Are you happy in your work?

____

9. Would you like to have your son or daughter do this type of work?

____

10. How is reading, writing, speaking, or listening important to your job?

____

____

____

____

EMPLOYMENT FORMS

These are very important. You must write legibly and give all the information that is needed. There will be many times in your life when you will fill out forms--

(a) when you go to college

(b) when you get a driver's license

(c) when you get married

(d) when you are applying for a job.

Pretend that you are applying for a job and fill in the following application. Remember to use your best handwriting. No one would hire you if they couldn't read the information you are giving them.

Name ____

Address ____

Parents ____

Parent's address _____________________________________

Age ________ Birthdate _______________________________

Male or female _________________ Phone _________________

Education (list schools attended and dates)

____

____

____

List former employers, address, and phone

____________________ ____________________ __________

____________________ ____________________ __________

____________________ ____________________ __________

List three personal references, address, and phone

____________________ ____________________ __________

____________________ ____________________ __________

____________________ ____________________ __________

SPELLING
WHAT DO YOU WANT TO BE?
VOCATIONS (WORLD OF WORK)

A	B	C	D
1. barber	1. explorer	1. accountant	1. veterinarian
2. soldier	2. carpenter	2. surgeon	2. pharmacist
3. artist	3. detective	3. lumbermen	3. beautician
4. pilot	4. librarian	4. dietician	4. executive
5. dentist	5. florist	5. aquanaut	5. photographer
6. doctor	6. lawyer	6. custodian	6. psychiatrist
7. dancer	7. minister	7. geologist	7. dermatologist
8. typist	8. waitress	8. entertainer	8. oceanographer
9. teacher	9. secretary	9. musician	9. zoologist
10. editor	10. comedian	10. author	10. cosmetologist
11. farmer	11. manager	11. stenographer	11. politician
12. butcher	12. salesman	12. biologist	12. botanist
13. nurse	13. pianist	13. instructor	13. columnist
14. janitor	14. lineman	14. contractor	14. novelist
15. policeman	15. speaker	15. physician	15. mortician
16. judge	16. reporter	16. engineer	16. cyclist
17. cowboy	17. fisherman	17. viclinist	17. pediatrician
18. postman	18. actor	18. chemist	18. administrator
19. inventor	19. actress	19. professor	19. linguist
20. patrolman	20. scientist	20. druggist	20. cartoonist

CAREER DEVELOI T ACTIVITIES

BROAD OBJECTIVE: To give students an opportunity to express goals and aspirations
CONCEPTS: A. Individuals differ in abilities, interest, attitudes and values. Leisure time activities affect career choice. B. A Society needs both a producer of goods and producer of services.
SPECIFIC BEHAVIORAL OBJECTIVE: Each student will read about and write a written report on five men and list six reasons for their success in their occupational field.

SUGGESTED SUBJECT AREA Language Arts
Reading - Biography
SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Introduce biography books on hand and how others may be found in library. 2. Share ideas obtained from reading with other pupils. a. book jackets b. dioramas c. reports d. dramatize c. role playing 3. Use attached sheet as example of other activities connected with the biography books.	Teacher mentions books and ask students to help these things in mind as they read the books: 1. Individuals early years a. home b. school c. hobbies d. his goals in life e. early employment 2. Problems he had faced. 3. How he coped with these problems. 4. How individual attained greatness in his area. 5. Character qualities of individuals. Write your auto-biography projecting it into the future.	Books - Biographies Song - Knowledge and Wisdom (round)

SUGGESTED CORRELATION FOR THIS ACTIVITY:

PRO FOOTBALL HEROES

Steve Gelman

■ TEN football heroes are discussed, and photographs are included. Some background information about their lives is given, as well as the records they attained. All were or are players except Vince Lombardi, who was a coach.

QUESTIONS

1. What, in your opinion, are the main requirements for being a success in professional football?
2. What do you think is the main difference between amateur and professional football?
3. Can you name the pro football heroes described on the back cover of the book?
4. Which one of these men do you admire most? Why? What team do you follow during the season? Would you like to play professional football when you finish school?

APPRECIATIONS

1. What do you think made Vince Lombardi a great coach? Why do you suppose he was included in this book even though he didn't play professionally?
2. The language used in writing about sports is as colorful as the people in sports. One kind of description is a *simile*. What *simile* is used to describe the power of Chuck Bednarik when he tackled an opponent? (19) What simile is used to describe how the runner moved behind Bronko Negurski's blocks? (46)
3. Did you catch the humor of Coach Spears' remark about Bronko on page 44?
4. What knowledge would you need if you wanted to be a sportscaster? Read aloud, as a sportscaster would, some of the description on page 11, starting with "The Colts kicked off . . ."

1 Make a cartoon using the simile on page 35. Bednarik would be the alley cat and his opponent would be the mouse. You'll have to put football uniforms on the cat and mouse. Show your cartoon to the class and explain what it means. You may want to write the simile under the cartoon. You might like to make cartoons showing the other two similes, one on page 19 and the other on page 46. Perhaps some friends might also want to draw cartoons.

2 Compare the uniforms worn by Jim Thorpe (106) and Johnny Unitas (4). There are two major changes in the helmet design—the material from which it is made, and the addition of the face guard. Draw the two helmets on paper or on the board and explain to the class why these changes were made.

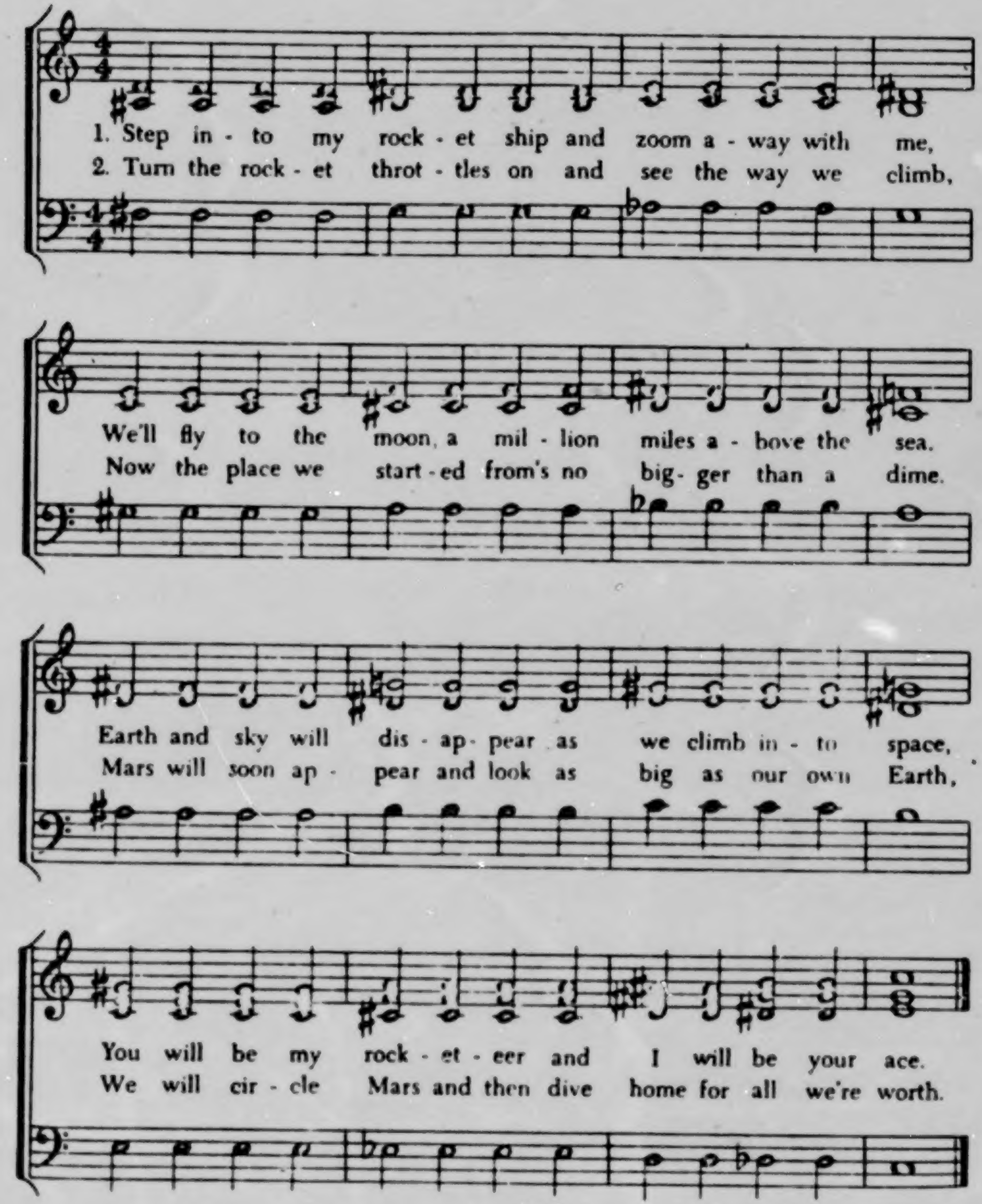
3 If there is a particular team that you follow during the season, you might like to tell the class about some of the men on the team. You can write to the team's office for additional information and for pictures.

4 The title chapters for each of these pro football heroes describe some characteristic or quality or nickname given them, such as Red Grange being called the "Galloping Ghost," or Chuck Bednarik being called "Modern Iron Man." Perhaps you have some favorite football players that you could describe in a similar way. Make a collection in the form of a booklet or write down short descriptions about some well-known football players and see if some interested friends can guess the players.

As the melody is sung, take turns
playing this easy piano accompaniment.
Note that each phrase moves up—steadily.

Rocket Ship

WORDS AND MUSIC BY HOAGY CARMICHAEL


1. Step in - to my rock - et ship and zoom a - way with me,
2. Turn the rock - et throt - tles on and see the way we climb,
We'll fly to the moon, a mil - lion miles a - bove the sea.
Now the place we start - ed from's no big - ger than a dime.
Earth and sky will dis - ap - pear as we climb in - to space,
Mars will soon ap - pear and look as big as our own Earth,
You will be my rock - et - eer and I will be your ace.
We will cir - cle Mars and then dive home for all we're worth.

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To present appropriate occupational information about the world of work

CONCEPT: People in the United States Must Live and Work Together

SPECIFIC BEHAVIORAL OBJECTIVE: Students show that they are able to understand why we need government workers by listing three reasons why we need them.

SUGGESTED SUBJECT AREA Social Studies

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Have students list jobs that they know are related to government. 2. Visit local government offices. 3. Visit state legislature in session. 4. Have students interview government worker to see what their job entails. 5. Have a government worker come into the classroom and talk about his work.	1. Discuss what we mean by the word government; disucss different levels of government - local, county, state, federal. 2. Discuss why we need various levels of government.	Books: All About Courts and the Law Ruth Brindze, Randon House Inc. 1964 About the People Who Run Your City Shirlee and Sherman D. Newman. Melmont Publ. Inc. 1963 * Let's Go to the Supreme Court, Bernard Rosenfield. G. P. Putnam's Sons. 1960 * What Does a Congressman Do? David Lavine, Dodd-Mead 1965 * Read About the Postman, L. Slobodkin Franklin Watts, 1966 * Films: Our Post Office (11 min) 2323 EBE Songs: "Marines Hymn" Field "Artillery Song" "Air Force Song" "My Name is Liberty", "America the Beauti "Star Spangled Banner" "Four Faces of Mt. Rushmore", "Abraham, Martin & John" "Ballad of the Green Beret" "These Things Shall Be" Mastering Music, ABC Bk 6 p. 2 1970

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop a wide and varied interest that will open up an expanded basis for vocational choice.

CONCEPT: Geographical location determines kinds of work found therein.

SPECIFIC BEHAVIORAL OBJECTIVE: After the completion of the United States Unit, students will indicate interest in the geographical area of the U. S. by completing one project of his choice related to geographical area of the U.S.

SUGGESTED SUBJECT AREA Social Studies

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. The following activities make up a unit in which the student becomes acquainted with the fundamental geographic understandings. He realizes that the favorable geographic situation and the abundant natural resources of the United States have had much to do with its development. Within its vast expanse of territory he discovers what adaptations man has had to make to every sort of climate and natural environment in order to provide for basic human needs. An outline for study of How the People of the United States Live and Work Together is given on the next page. The following outline is a number of suggested activities and the suggested subject matter it may be integrated with.	1. Discuss how the people of the United States must work together in order to live together harmoniously. 2. Discuss how people have adapted their ways of living (work and play) to the environments in the five geographical sections: a. New England States b. Middle Atlantic States c. Central States d. Southern States e. Western States	

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop a wide and varied interest that will open up an expanded basis for vocational choice.

CONCEPT: Math concepts are necessary in communicating.

SPECIFIC BEHAVIORAL OBJECTIVE: After completing a study of a particular region each student will demonstrate his topographical knowledge by drawing a map of that area.

SUGGESTED SUBJECT AREA Social Studies

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
A) Have students draw or teacher distribute dittoed outline maps of the United States. Students will then darken New England and Central States for size and location purposes. B) Have the students prepare a large outline map of this region. From the magazines or catalogs, have them cut out pictures of products which are manufactured in the New England States and paste them on the map at or near the places where they are manufactured.	A) Discuss how location will influence the following: a. Occupations b. Recreational activities c. Cultural heritage B) Draw a series of pictures showing how maple syrup is made. C) Prepare a special report on the fishing industry along the coast of New England. Compare modern methods of commercial fishing with those of earlier years. D) Have the students locate the agricultural regions of the North Central States on a map.	Books: Any basic text or other reference books. *Men At Work in New England, Henry B. Le G. P. Putnam's Sons. New York 1967 Filmstrips: Bismarck Film Library 884 Southern New England Region 311 Then and Now in New England 1075 Living in New England Films: Early Settlers in New Englan 11 Min b/w 139 Northeastern States (11 min) 855 The Industrial Worker (17 min) 2852 Songs: "Daniel Boone" The City Blues - Experiencing Music Bk. 5 ABC 1970 p. 6 Leaving On a Jet Plane - This is My Coun Blow The Man Down

SUGGESTED CORRELATION FOR THIS ACTIVITY:

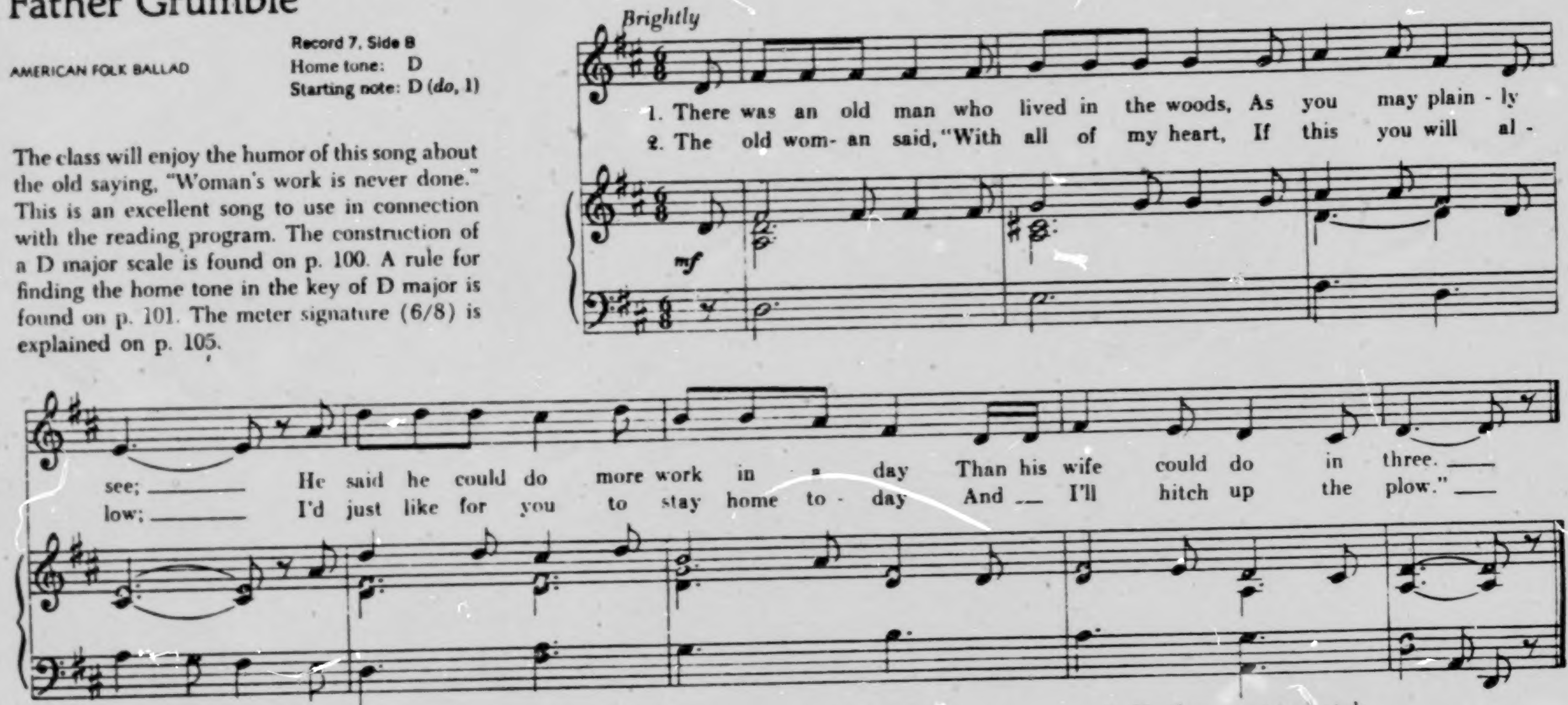
Father Grumble

AMERICAN FOLK BALLAD

Record 7, Side B
Home tone: D
Starting note: D (*do*, 1)

The class will enjoy the humor of this song about the old saying, "Woman's work is never done." This is an excellent song to use in connection with the reading program. The construction of a D major scale is found on p. 100. A rule for finding the home tone in the key of D major is found on p. 101. The meter signature (6/8) is explained on p. 105.

You will enjoy acting out the events described in this song. Which measures outline the notes of the I chord?


Brightly
1. There was an old man who lived in the woods, As you may plain - ly
2. The old wom- an said, "With all of my heart, If this you will al -
mf
see; He said he could do more work in a day Than his wife could do in three.
low; I'd just like for you to stay home to - day And I'll hitch up the plow."

3. "But then you must milk
Old Tiny the cow,
For fear she will go dry,
And then you must feed
the little brown pig
That stands in yonder sty."

4. "And then you must watch
the old speckled hen
For fear she'll run a-way.
And then you must wind
the big hank of yarn
That I spun yesterday."

5. The old woman took the staff
in her hand
And went to hitch the plow;
The old man then took
the pail in his hand
And went to milk the cow.

6. Old Tiny she winked,
Old Tiny she blinked,
And then turned up her tail,
And gave the old man
a kick on his head,
And the milk ran from his pail.

7. He then went to watch
the old speckled hen
For fear she ran astray,
But then he forgot the big
hank of yarn
His wife spun yesterday.

8. He swore by the sun, the moon,
and the stars,
The green leaves on the tree,
That if his dear wife ne'er
worked in her life,
She'd never be blamed by he.

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To present appropriate information about the world of work

CONCEPT: Math concepts are necessary in communicating

SPECIFIC BEHAVIORAL OBJECTIVE: Students are able to list the Math related occupation that pays the highest salary and the one that pays the lowest of those graphed.

SUGGESTED SUBJECT AREA Math

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Make graph showing weekly, hourly, or monthly wages of various kinds of workers. Types of graphs: pictograph, line, bar	1. Discuss various uses of graphs using actual samples of each. 2. Review reading of the three types of graphs. 3. Discuss most appropriate graph for any given data. 4. Direct students to sources of given data.	Samples of graphs Encyclopedias and other reference books Math text Occupational [illegible]ok Handbook U. S. Department of Labor Employment Security Bureau 1. Resource person visit class 2. Committee visit bureau 3. Write to bureau for information *Film: What are Decimals? (12 min) B/W 981 EBE Filmstrip: 292 A Graph Tells A Story 572 Measurement 557 Scale Drawing from Bismarck Public School Filmstrip Library

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop a wide and varied interest that will open up an expanded basis for vocational choice.

CONCEPT: Geographical location determines kinds of work found therein

SPECIFIC BEHAVIORAL OBJECTIVE: To enable the student to show his knowledge of work in the middle Atlantic States. Each student will list at least two occupations found there.

SUGGESTED SUBJECT AREA Social Studies

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Individual or group work researching various occupations of the Middle Atlantic States.	1. Divide the room into several small groups. Each group will attempt to identify the greatest number of occupations found in the Middle Atlantic States Points will be awarded for both listing and defining the occupation. 2. Prepare a list of products made from steel. Star the products used in their home. 3. Students may do a writing activity such as "What might my family do if we lived here?" 4. Optional related learning activities could include student reports on: Benjamin Franklin, inventor and publisher; the Erie Canal; the Statue of Liberty; Coal mining in Pennsylvania; Thomas Edison's inventions, etc.	Books: Any basic text or other reference sources. * Men At Work in the Mid Atlantic States, Henry B. Lent. G. P. Putnam's Sons: New York, 1961 Filmstrips: 875 Middle Atlantic Seaboard (great citie 305 Appalachian Mountains 308 Then and Now along the Main Street of the East Films: *The Northeast - Gateway For a Nation (11 min) 2501 EBE * The Industrial City (16 min) 2854 EBE Linda and Billy Ray From Appalachia (15 min) 2975 EBE Songs: "The City Blues" Experiencing Musi Bk 5 ABC 1970 p. 6 -"Drill Ye Tarriers Dri Experiencing Music p. 84 - Erie Canal John Henry - 16 Ton - East Side, West Sid Blow the Man Down

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop a wide and varied interest that will open up an expanded basis for vocational choice.

CONCEPT: The ability to communicate effectively helps a person work well with other people.

SPECIFIC BEHAVIORAL OBJECTIVE: To demonstrate knowledge about the central states each student will list four occupations found in these states during simulated bus trip.

SUGGESTED SUBJECT AREA Social studies

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Bus route through Central States Growing season map with colored legend.	1. Each student simulates the head guide of a bus tour through the Central States. The student must plan the route and points of interest on the tour, types of workers found there. 2. Discuss the meaning of a map legend and its relationship to different lengths of growing seasons. Illustrate the varying growing seasons on a map of the Central States. 3. Prepare an exhibit of different kinds of grain products such as flour, cereal, and medicine. (These materials could later be boxed and exchanged with other states - specify education on box for cheaper postage.)	Books: Any basic social studies text or other reference material. Filmstrips: Bismarck Public Schools 309 Midwest Dairy Lands 301 Then and Now on the Great Lakes Waterway 880 Great Lakes Area - Men, Minerals, Machines 879 Central Farming Region 312 Corn Belt (Then and Now) Films: * The Great Lakes (23 min) EBE * Our Changing Way of Life - The Dairy Farmer (17 min) EBE

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
		* The Middle West (25 min) EBE * The Great Plains - Land of Risk EBE (15 min) 2275 * Meat from Range to Market (10 min) EBE 932 Songs: Colorado Trail Red River Valley Home on the Range Deep in the Heart of Texas North Dakota Riverboat El Paso America The Beautiful Paul Bunyon Streets of Laredo Galveston

Shuckin' of the Corn

Key: D Starting Tone: D (1)
Autoharp Key: C Starting Tone: C (1)
Autoharp chords not in Pupil's Book
Meter: $\frac{2}{4}\left(\frac{2}{♩}\right)$
Piano accompaniment on page 282

RHYTHM: Scan the rhythmic notation. Notice that the rhythm usually sounds with the beat or with two tones to a beat. Look at the third measure. HOW WILL THE RHYTHM OF THIS MEASURE SOUND? Help children recall that it will be **syncopated** because the pattern is made up of a short tone followed by a long tone. The accent therefore falls on the part of the beat which is ordinarily unaccented.

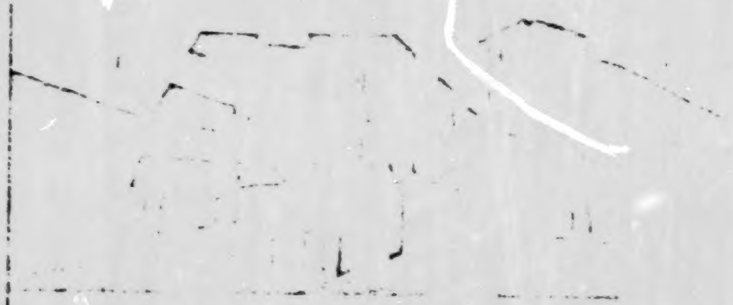
When children know the melody, add the rhythmic accompaniment as suggested in their books.

- MELODY: As children study the melodic notation, guide them to notice repeated patterns and patterns that are similar. Compare phrase one and phrase two. Notice that the contours of the melodies are similar. Notice that the last two phrases of the verse and the last two phrases of the refrain are almost identical. The difference lies in the rhythm. Notice that the first and second phrases in the verse are similar to the second phrase of the refrain.

When children have examined the song carefully, establish tonality and encourage them to sing the melody on "loo." Listen to the recording and correct the children's singing errors.

- HARMONY: When children know the melody well, ask one child to add an accompaniment on the autoharp. Use this opportunity to teach the class how to transpose chords and to give them practice in determining the I, IV, and V7 chords of a song. Discuss with the children the fact that the song must be **transposed** in order to sing it with the autoharp. The song is written in the pupil's book in D. Because the chords for the key of D cannot be played on the autoharp, it must now be sung in C.

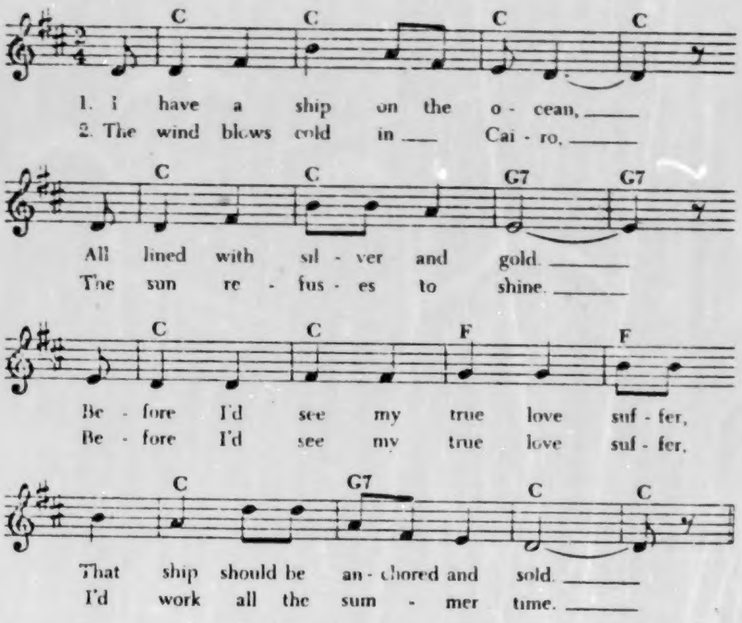
Help the children write the sequence of chords for this song in the key of D. Write the chord number in roman numerals below each letter. Then, following the roman numerals, write the letter names for the chords in the key of C. Help the children realize that they have now



Shuckin' of the Corn

American Folk Song

The early settlers in the Middle West knew the value of good neighbors. If someone needed help at a barn-raising, the wheat harvest, or at corn-picking time, his neighbors would come to help. When the work was finished, everyone would celebrate.


C
C
C
C
1. I have a ship on the o - cean,
2. The wind blows cold in Cai - ro,
C
C
G7
G7
All lined with sil - ver and gold.
The sun re - fus - es to shine.
C
C
F
F
Be - fore I'd see my true love suf - fer,
Be - fore I'd see my true love suf - fer,
C
G7
C
C
That ship should be an - chored and sold.
I'd work all the sum - mer time.

Record 4 Side B Band 5. VOICES: soprano, baritone.
ACCOMPANIMENT: accordion, banjo, double bass, percussion.
FORM: Introduction, *8 meas.;* Vocal, *v. 1;* Instrumental; Vocal, *v. 2;* Vocal (refrain).

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop a wide and varied interest that will open up an expanded basis for vocational choice.

CONCEPT: Advances in science have altered the occupations that produce goods and occupations that produce services.

SPECIFIC BEHAVIORAL OBJECTIVE: After completion of the unit on the United States, each student will demonstrate his knowledge of occupations throughout the country by listing at least one different major occupation in five states.

SUGGESTED SUBJECT AREA Social Studies

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Mapwork. Showing location of states, cities and occupations found there.	On an outline map of the United States print the name of each state. Locate the capital and other important cities. Show the major rivers. On an outline map of the world, locate Alaska and Hawaii. Label the important cities and other points of interest. Make comparisons between Alaska and Hawaii concerning size, climate and industries. In each state have student label major occupations found there.	Books: Any available reference materials. Most school libraries have books on Alaska and Hawaii Filmstrips: Bismarck Public Schools 261, 267, 443 Alaska 877 Alaska, American Frontier State 883 Hawaii, American Island Stat 757 Hawaiian Islands Film: * Alaska - The 49th State (16 min) EBE * Hawaii - The 50th State (17 min) EBE Songs: Blue Hawaii North to Alaska Hawaiian Love Song

SUGGESTED CORRELATION FOR THIS ACTIVITY:

QUESTIONS TO ASK ABOUT INDUSTRY

1. WHAT IS THE NAME OF THE INDUSTRY?
2. WHERE IS IT LOCATED?
3. WHAT PRODUCTS COME FROM THIS INDUSTRY?
4. WHAT ARE SOME OF THE RAW MATERIALS USED AND WHERE DO THEY COME FROM?
5. WHERE ARE THE PRODUCTS SENT?
6. HOW MANY WORKERS ARE IN THE PLANT?
7. WHAT ARE SOME OF THEIR JOB TITLES?
8. WHAT IS THE DAY OF ONE OF THESE WORKERS LIKE?

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To provide more specific observational experiences about the world of work

CONCEPT: A. A society needs both a producer of goods and services B. Individuals differ in their abilities, interests, attitudes and values.

SPECIFIC BEHAVIORAL OBJECTIVE: Students are able to relate what an adult does at a job by listing three things that the student has learned about the job.

SUGGESTED SUBJECT AREA Social Studies

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Child spends a period of time with an adult on his job.	1. Discuss with students such things as: a. What to look for b. Safety c. Courtesy d. Questions to ask of the worker. 2. Follow-up activities a. Report to class (1) Oral or written b. Make comparisons (1) Similarities of jobs (2) Differences of jobs (3) Working conditions (4) Preparation for job (a) Related to school subjects (5) Clothing worn (6) Tools or special equipment	Brochures from parent's business

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To present appropriate occupational information using a broad introduction of occupations throughout the world.

CONDEPT: Individuals live in a particular geographical location due to the nature of their work.

SPECIFIC BEHAVIORAL OBJECTIVE: After construction of a state float, each student will list 6 to 12 occupations unique to that respective state.

SUGGESTED SUBJECT AREA Geography (social study

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Class makes floats for each state in the union primarily to show different kinds of work done in that state. (This could possibly best be used as a culminating activity for study of U. S.) 2. The float project should contain examples of at least: a. two products b. two occupations c. a state motto d. encourage creativity that reflects geographical integration of each state	1. Discuss thoroughly with class types of work done in state. 2. Make list (student does this) of types of work for state chosen. 3. Explain how basic platform can be constructed. (shoeboxes, cardboard sheets, etc.) 4. Student does research to determine types of work done in that state.	1. Any U. S. reference book. 2. Your basic geography or social studies textbooks 3. Encyclopedias 4. Shoe boxes 5. Pieces of cloth, styrofoam, etc. 6. Books or filmstrips used in previous U. S. geographical activities.

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To present appropriate occupational information using a broad introduction of occupations throughout the world.

CONCEPT: Individuals live in a particular geographical location due to the nature of their work.

SPECIFIC BEHAVIORAL OBJECTIVE: Student shows that he understands that geographical location determines kinds of work found there by lising two (2) workers in each of the U. S. industries studies.

SUGGESTED SUBJECT AREA Social Studies

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Go over these industries in the various regions of the United States and have students make a booklet showing the workers involved in each industry. This may be done on an individual basis, by a small group or entire class concentrating on the same industry. Regions and their industries listed on next page. The kind of information that can be obtained about workers is indicated by the questions youngsters can ask in the area about an industry.	This activity could take place during the study of the United States or as a culmination. Discuss how the work that we do is affected by the place we live. Ask the students if they know of some other areas of the U.S. where we would find different workers than we would in our area.	Books: * Men at Work in the Mid-Atlantic States 1967 * Men at Work in New England 1956 * Men at Work in the South 1957 * Men at Work in the Great Lake States 1958 * Men at Work on the West Coast 1959 Henry Roller Lent Songs: The City Blues - p. 6 Experiencing Music A B C 1970

SUGGESTED CORRELATION FOR THIS ACTIVITY:

REGIONS OF THE UNITED STATES AND THEIR INDUSTRIES

A. New England States

1. Textile
2. Metal
3. Fishing
4. Quarrying

B. Middle Atlantic States

1. Coal mining
2. Manuafacturing
    a. Electrical wares
    b. Iron and steel
    c. Photographic equipment
3. Canning
4. Shipbuilding

C. South Atlantic States

1. Tobacco
2. Cotton

D. South Central States

1. Petroleum
2. Cattle raising
3. Farming
    a. Rice
    b. Sugarcane

E. North Central States

1. Automobile
2. Meat packing
3. Farming
    a. Dairy
    b. Corn

F. West Central States

1. Flour milling
2. Sheep raising
3. Wheat

G. Mountain States

1. Mining
    a. Gold
    b. Silver
    c. Copper
2. Smelting
3. Vegetable growing

H. Pacific States

1. Fruit growing
2. Lumbering
3. Airplane manufacturing

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To present appropriate occupational information using a broad introduction of occupations throughout the world.

CONCEPT: A. Geographical location determines kinds of work found therein. B. Individuals live in a particular geographical location due to the nature of their work.

SPECIFIC BEHAVIORAL OBJECTIVE: Given any country studied, student is able to compare worker classification of that area with those in his own area and list two similarities and two differences.

SUGGESTED SUBJECT AREA Social Studies

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Have students compare jobs of similar latitudes. 2. Have students compare standards of living and values of other countries and areas with their own. 3. Compare various products in other regions or countries with their own and how these affect the workers of that region. Suggested types of products are a. Agricultural 1. Workers involved b. Mining, drilling, and quarrying c. Forest d. Water e. Manufacturing 4. Compare accessability to various forms of transportation in other regions: water, land air. 5. Compare customs in other regions with your own and their effect on workers of the region.	At any time during the year when the opportunity arises the teacher should discuss with the students how the workers of the area studied compare (are they similar or different) with students own area and reasons for being different or similar.	Geography text Maps

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To provide more specific observational experiences about the world of work

CONCEPT: Geographical location determines kinds of work found therein

SPECIFIC BEHAVIORAL OBJECTIVE: To demonstrate this knowledge of one phase of the U. S. Cattle industry each student will list at least five jobs connected with a sales ring.

SUGGESTED SUBJECT AREA Social Studies

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Field trip to livestock auction ring. 2. Lunch of hamburgers and milk in the dining room. 3. Walking on the catwalk to see various breeds of cattle. 4. Auctioneer coming to classroom. a. Account his life's work training qualifications, ups and downs. b. Auctioneer selling some item in the classroom.	Discuss the cattle industry in middle states of the U. S. Talk about the relationship in the grass-fed cattle and cattle fed in the corn belt. Experience stories can be written. Pictures from farm magazines can be cut out to illustrate the stories.	Sales ring Auctioneer Song: Get Along Little Doggie Chisolm Trail Farm or agricultural magazines

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop a wide and varied interest that will open up an expanded basis for vocational choice.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student will be able to list one occupation in the six regions studied.

SUGGESTED SUBJECT AREA Social Studies

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Teacher uses own discretion on how and when to use the booklet.	1. Make a booklet of the following materials for each student. Use these materials of studying the United States over a extended period of time. Only parts of this booklet should be filled in as areas of the United States are studied. Booklets should be collected when not in use to maintain longevity of material.	1. Encyclopedias 2. Textbooks 3. Filmstrips on specific areas of the United States 4. Library resources 5. Films: The Wheat Farmer 1441 Cattleman - Ranchers's Story 2219 The Dairy Farmer - Our Changing Way of Life 2235 The Interior West: Land Nobody Wanted 2409 The Industrial City 2854 The Industrial Worker 2852 The Lumberman - Our Changing Way of Life 2257 Meat - From Range to Market 932 Midwest - Heartland of the Nation 2761 The Northeast: Gateway for a Nation 2501 Northeastern States 855 The Pacific West 2764 People Along the Mississippi 562 Southeastern States 895

SUGGESTED CORRELATION FOR THIS ACTIVITY:

ALABAMA			
ALASKA			
ARIZONA			
ARKANSAS			
CALIFORNIA			
COLORADIO			
CONNECTICUT			
DELAWARE			
FLORIDA			
GEORGIA			
IDAHO			
ILLINOIS			
INDIANA			
IOWA			
KANSAS			
KENTUCKY			
LOUISIANA			

21-a

MAINE			
MARYLAND			
MASSACHUSETTS			
MICHIGAN			
MINNESOTA			
MISSISSIPPI			
MISSOURI			
MONTANA			
NEBRASKA			
NEVADA			
NEW HAMPSHIRE			
NEW JERSEY			
NEW MEXICO			
NEW YORK			
NORTH CAROLINA			
NORTH DAKOTA			
OHIO			

21b

OKLAHOMA			
OREGON			
PENNSYLVANIA			
RHODE ISLAND			
SOUTH CAROLINA			
SOUTH DAKOTA			
TENNESSEE			
TEXAS			
UTAH			
VERMONT			
VIRGINIA			
WASHINGTON			
WEST VIRGINIA			
WISCONSIN			
WYOMING			
HAWAII			

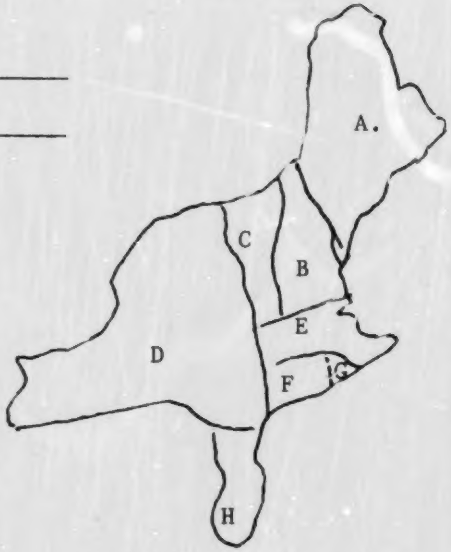
21c

NAME EACH STATE

A. ________ B. ________ C. ________

D. ________ E. ________ F. ________

G. ________ H. ________



Listed below are some of the industries of the Eastern coast. Can you name at least one job that would need workers as a result of this specific industry? Refer to job definitions on page

Example: Citrus fruits fruit pickers

1. Dairies ________
2. Shipping ________
3. Precision tool factories ________
4. Airplane construction ________
5. Ship building ________
6. Jewelry making ________
7. Building stone quarries ________
8. Manufacture of electrical Equipment ________
9. Paper products plants ________
10. Lumber industries ________
11. Cotton growing ________
12. Manufacture of leather goods and shoes ________

NAME EACH STATE

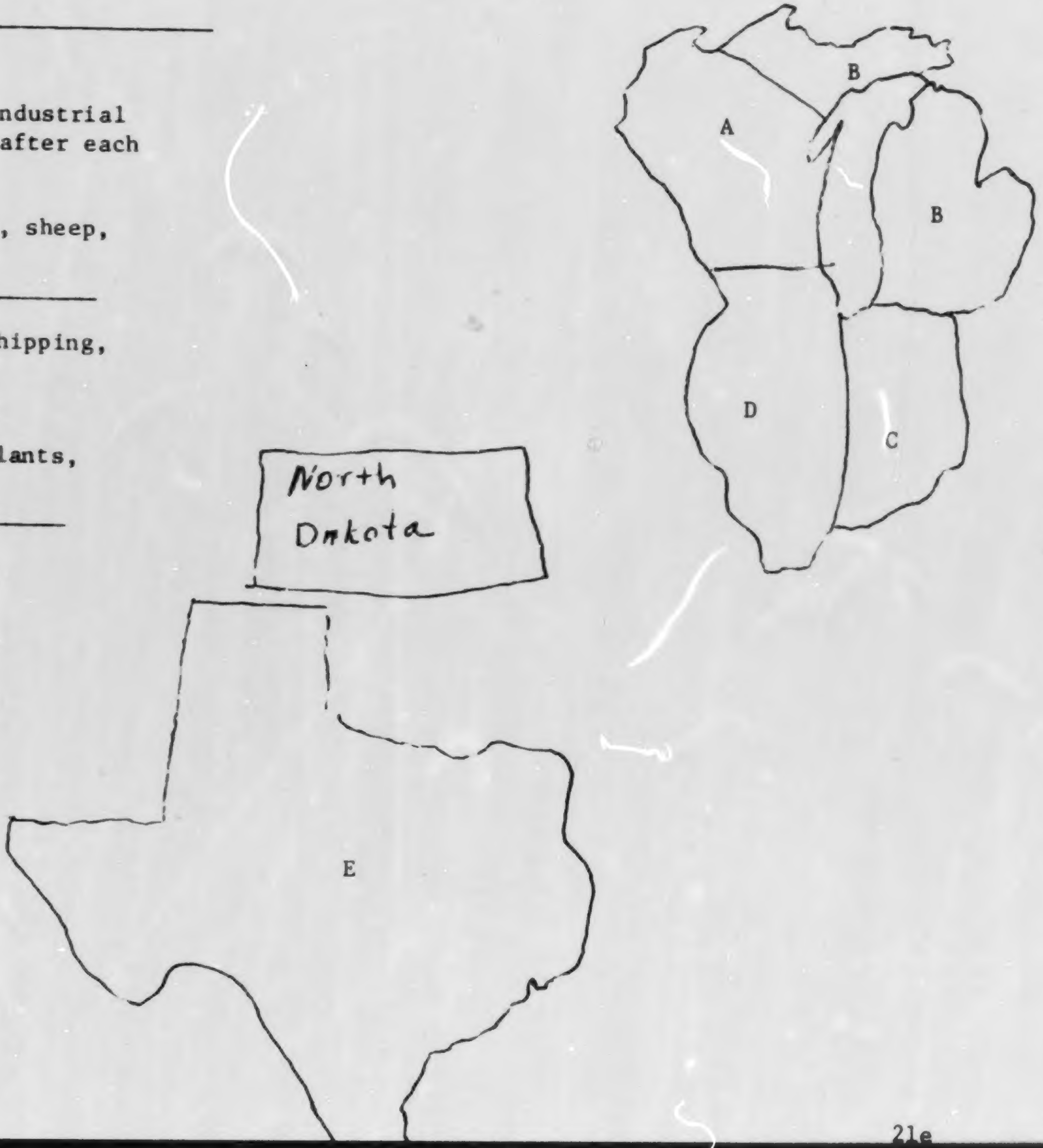
A. ____________________ B. ____________________ C. ____________________

D. ____________________ E. ____________________

Identify each of the five states by their industrial character. Write in the appropriate state after each description.

1. Minerals, cotton, sorghum, rice, cattle, sheep, citrus fruits, textiles, petroleum
   ____
2. Dairies, breweries, cheese factories, shipping, paper mills
   ____
3. Fresh water fisheries, breakfast food plants, auto factories, furniture
   ____
4. Soybeans, meat packing, printing, grain steel, coal
   ____
5. Grain, fruit, coal, farm machinery products, auto and airplane parts manufacturing, limestone
   ____

Discuss how the jobs available in these states differ from the jobs available in North Dakota.



1. The dairy industry is important in A. Wisconsin B. Illinois C. Indiana D. Texas.

2. List three occupations related to the dairy industry.

   ____

   ____

   ____

3. The automobile industry is important in A. Wisconsin B. Indiana C. Michigan D. North Dakota.

4. List five occupations related to the automobile industry.

   ____

   ____

   ____

   ____

   ____

5. Meat packing is especially important in A. Illinois B. Wisconsin C. North Dakota D. Indiana.

6. Cotton growers would be found mainly in A. Wisconsin B. Texas C. North Dakota D. Indiana.

1. The state providing the most jobs for people in the cotton industry is A. Nebraska B. Missouri C. Alabama D. Florida.

2. Name one occupation of the cotton industry related to the three different fields in parenthesis.

   ______________________________ (Producer)

   ______________________________ (Manufacturer)

   ______________________________ (Retailer)

3. Which state would need workers to handle citrus fruits? A. Nebraska B. Missouri C. Alabama D. Florida

4. List five different occupations related to the tourist industry?

   ____

   ____

   ____

   ____

   ____

Name each state

A. ______________________

B. ______________________

C. ______________________

D. ______________________

E. ______________________

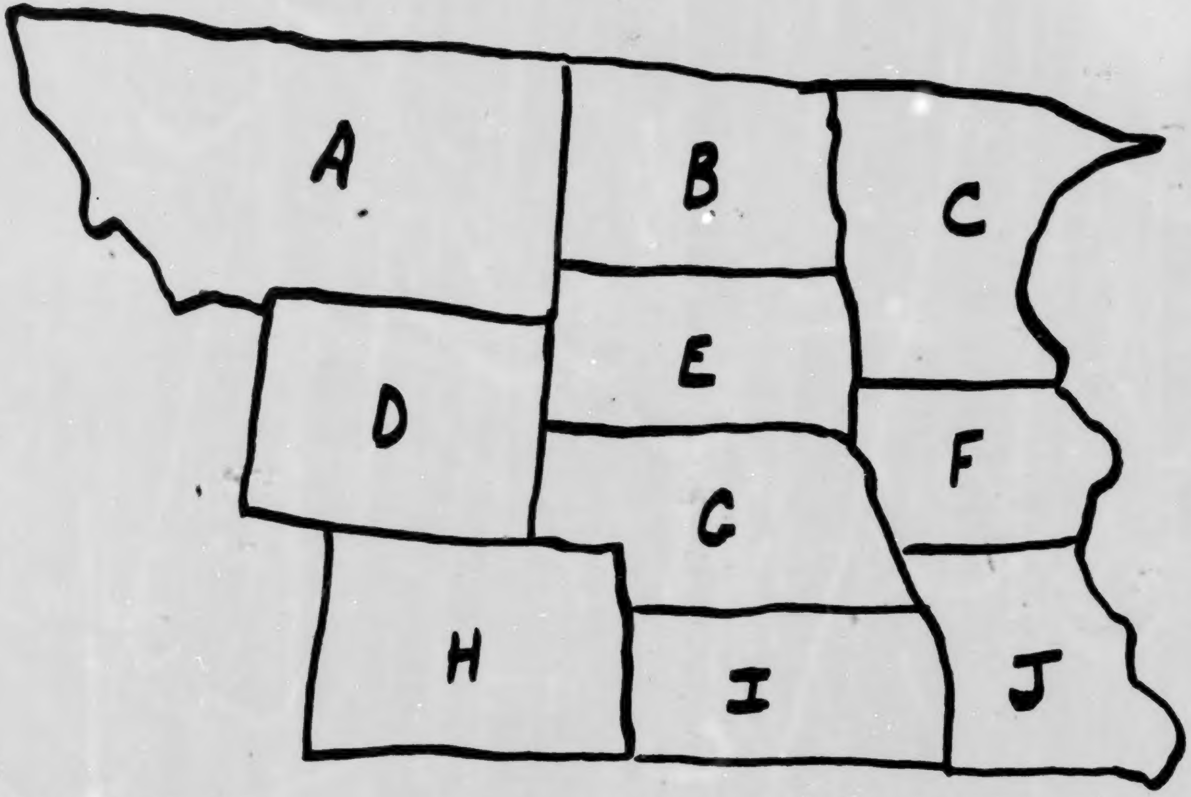
F. ______________________

G. ______________________

H. ______________________

I. ______________________

J. ______________________



Which five of the following workers would be most apt to find work in these states? Underline your answer.

- auto mechanic
- lumberjack
- miner
- tobacco grower
- peanut harvester
- farm worker
- meatpacker
- oil driller
- salmon fisherman
- ship builder

Which of these ten states might hire workers for growing cotton? ______________________

Which of these ten states would be most apt to hire people to work in orchards? ______________________

Which state would need more workers for factories making popcorn and breakfast cereal? ______________________

21 h

1. A leading occupation in North Dakota would probably be a/an A. steel worker B. farming C. aeronautical engineer D. textile manufacturer.

2. The state known for sheep raising is A. Iowa B. North Dakota C. Minnesota D. Montana.

3. Many pork meat cutters would probably be needed in A. Iowa B. North Dakota C. Wyoming D. Montana.

4. The capital of Colorado is A. Bismarck B. Pierre C. Denver D. Cheyenne.

5. List five different occupations found in this area.

   1. ______________________________
   2. ______________________________
   3. ______________________________
   4. ______________________________
   5. ______________________________

1. ____ Potato farming is very important in A. Idaho B. Washington C. Colorado.

2. ____ Fishing and fruit picking are important in Washington. (true or false)

3. ____ Truck farming is a major industry in A. North Dakota B. Idaho C. Washington D. Colorado.

4. List five occupations found in this area.

1. ____________________________
2. ____________________________
3. ____________________________
4. ____________________________
5. ____________________________

____________________ 1. What state would employ many longshoremen?

21 j

____________________ 2. What state is the most dependent upon tourism?

____________________ 3. What state would probably employ more nuclear physicists?

____________________ 4. List five different occupations found in this area.

____

____

____

____

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To make school subjects more meaningful.

SPECIFIC BEHAVIORAL OBJECTIVE: Have each student write a short essay explaining why primary elections are important forerunners to the National Political Convention.

SUGGESTED SUBJECT AREA Social Studies

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
A study of U. S. elections will familiarize students with different states of the United States and allow them to become more familiar with our government's political structure. In addition, children will become more aware of the role and importance of high-ranking politicians.	A. Place names of states on small squares of paper for lottery purposes or use state flash cards for same. Let each student draw one or two states. Children may be paired off to work together. They will be "delegates" of the states they drew. B. Students can write to the Chamber of Commerce in each state's capital to procure information regarding industries, occupations, and political information. (request delegate and House of Representative strength) As this activity progresses, children will become aware of famous politicians that originated from the state of their study. C. Arrange classroom desks in a semi-circle rows to simulate the seating arrangement in Congress. Let youngsters make posters of their respective states. Mount the posters on sticks which they will attach to their desks. The poster should include an outline map of the represented state and large	1. Encyclopedias 2. Materials from Chamber of Commerce fro capital cities 3. Students can request information from Congressmen or Senators Books: What Does a Congressman Do? David Lavine, Dodd, Mead and Co. 1965 What Does a Senator Do? David Lavine, Dodd, Mead and Co. 1967

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
	numbers indicating the correct amount of delegate votes from each state. Colorful slogans or illustrations depicting the states leading occupations, industries, products, tourist attractions, nicknames, etc. Can be mounted or drawn on the poster.	
	D. Review "paths" that lead to the presidency. Include citizenship, age, occupational background, etc.	
	E. Discuss the structure of our government and democracy. Topics could include: (1) check and balance of the three branches of government (2) electoral college (3) opposing philosophies of Hamilton and Jefferson	
	F. Hold a "mock election" in your room. Cast delegate votes according to state population. Students should learn campaign techniques and the importance of primary elections prior to upcoming national political conventions.	

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To make school subjects more meaningful.

SPECIFIC BEHAVIORAL OBJECTIVE: Students will be able to name three countries and two different occupations of South America.

SUGGESTED SUBJECT AREA Social Studies

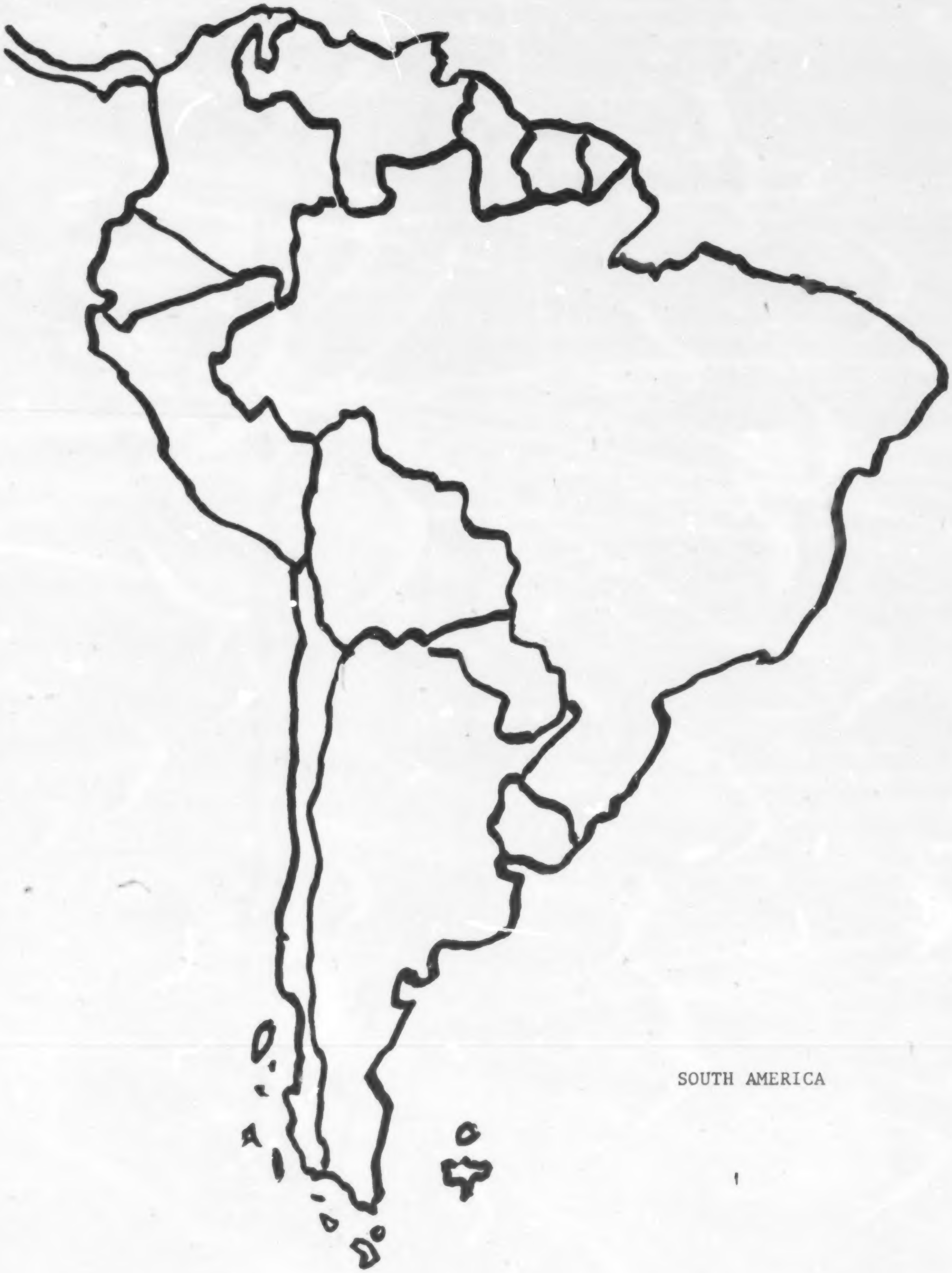
SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
This South America mapwork project will enable students to become more familiar with the geography resources, industries, and occupations of this continent. In addition, students can work at their own speed or work in small teams. They may obtain their information from textbooks, atlases, encyclopedias, or any other reliable source.	Divide students into small groups of twos and threes. Have each group draw a ship bearing the name of a South American country. Each group will be given half a sheet of construction paper. On this paper they will draw a small outline map of the country and at least two illustrations indicating the leading occupations, industries, or products. The teacher may then collect the completed projects and place them on a bulletin board as a resource for the following map activity. Pass out a dittoed outline map of South America to each student. Include the following directions: A. Label each country in all CAPITAL LETTERS. B. Label each country's largest city in red. C. Label and underline (in black) each country's capital. (If it is already labeled in red, simply underline in black.) D. Label and illustrate at least one	Geography textbooks, atlases, encyclopedias resource books, and student bulletin board. (See suggested technique)

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
	important resource or occupation in each country. Allow the student three days in which to complete this project. The group work should be completed at the end of the first day.	



SOUTH AMERICA

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To make school subjects more meaningful

SPECIFIC BEHAVIORAL OBJECTIVE: Each student will complete one of the five projects provided in the activity section.

SUGGESTED SUBJECT AREA Art

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Students will be assigned to complete at least one of the following projects: (1) A physical map of the West. (2) A drawing showing some historic event such as the driving of the golden spike, the pony express, the Mormons arriving in Utah, etc. (3) A contemporary poster illustrating examples of farm products grown in California. (4) A map showing the series of dams on the Colombia River, national parks in the West, etc. (5) A map illustrating various occupations in the West.	A. This activity should be employed after a certain area of the United States has been studied. B. The following rules may be helpful in administering the activity: 1. All work will be completed on a 9 x 12" piece of white or manila drawing paper. 2. All projects will contain some coloring (crayons, colored pencils or markers, water colors, etc.). 3. Students should bring all needed materials: glue, ruler, pencils, crayons, etc. 4. All projects must be completed by end of the period. 5. All projects must have a title or slogan. C. If the teacher wishes to evaluate the projects the following techniques may be used: 1. Appropriateness of subject	Geography texts, atlases, encyclopedias, maps, library books Films: 2409 The Interior West: Land Nobody Wanted 2764 The Pacific West Books: Men at Work on the West Coast Lent, Baker, and Taylor

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
	2. Neatness and design 3. Research shown 4. Thoroughness (detail)	

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To provide more specific observational experiences about the world of work

CONCEPT: The value of most goods is based on a monetary system

SPECIFIC BEHAVIORAL OBJECTIVE: Each student will show that he is aware of the cost of food, by comparing weekly grocery cost with weekly salary.

SUGGESTED SUBJECT AREA Math

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
	Discuss:	Filmstrip: Bismarck Public Schools 569 Percentage and Using Money 581 Story of money. Films: * Mans Basic Need (11 min) * Money and Its Uses (11 min) 2015 EBE Songs: "Coffee" Making Music Your Own Silver Burdett p. 8 "Baked Potato" Making Music Your Own Silver Burdett pp. 174-175 Billy Boy - Tea for Two Lemon Tree - Sipping Cider Through A Str.
1. Plan a weeks menu	1. What should be included in each meal Discuss basic foods needed each day.	
2. Use a newspaper ad and make a shopping list, include cost of all foods.	2. What is the total amount for week's grocery purchase.	
3. Graph your grocery costs comparing them with your weekly salary. (circle graph)	3. What part of ($100 per week) salary would you spend on groceries.	
4. Play store - add up grocery order, make proper change.	4. Have students apply for various jobs in grocery store and role play customer and grocery store situation.	
5. Have a group of students research the cost of food in their lunch (hot or cold) for one day.	5. Students could do this by going to store, hot lunch room or any other necessary place.	
	Other Discussion Questions:	
	1. What quantities of certain basic foods are needed for your families for one week? Such as (cont)	

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
	a. milk b. bread c. fruit 2. Is it cheaper to buy canned food by the case? How could you find out? 3. Are pre-packaged and ready-to-eat foods more expensive?	

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To make school subjects more meaningful

CONCEPT: Understanding of mathematics helps people in their work

SPECIFIC BEHAVIORAL OBJECTIVE: Students are able to cite at least five examples of how math is used in everyday living.

SUGGESTED SUBJECT AREA Math

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Interview parents to find out if and how they use math on or off the job.	1. Class discussion relating to present knowledge of how math is used by their parents on or off the job. 2. Ask students how we can find out more about how their parents use math.	Parents Friends Relatives Books Recipe books Calorie counters Check book Time sheets Budget Magazines Films: * What are Fractions- (12 min) b/w 980 * Weight and Measures (14 min) B/W

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To make school subjects more meaningful

CONCEPTS: Math concepts are necessary in communicating

SPECIFIC BEHAVIORAL OBJECTIVE: Students will list three reasons why number concepts are necessary in communication.

SUGGESTED SUBJECT AREA Math

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Student marks out each mathematics related word or phrase in an article in a newspaper. 2. Students read article omitting math concepts.	1. Discuss different uses for mathematics in our daily lives. 2. Discuss meaning of communication and different forms of communication. 3. Ask students if they think math concepts are needed in communicating.	Newspapers Felt pencils Film: * Numerals Everywhere (9 min) 2774 EBE

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To make school subjects more meaningful.

SPECIFIC BEHAVIORAL OBJECTIVE: Given $25 each student will be able to pick groceries from the sales ads that will provide a balanced diet of the basic foods.

SUGGESTED SUBJECT AREA Math

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Review the different denominations in money. Example: a. cents e. one dollar bills b. nickels f. five dollar bills c. dimes g. ten dollar bills d. quarters 2. Practice making change. 3. Discuss the various items a normal family needs during the week. 4. Make up a weekly budget together as a class before having students do it on their own. Follow-up Activities 1. Discuss why some products are more expensive than other products (due to distance for shipping, labor, etc.)	Each student should bring a newspaper containing the weekly grocery ads. Then each student is given twenty-five dollars in play money to buy the family groceries for the week. The student cannot spend more than the twenty-five dollars. Review the basic foods needed daily.	Newspaper Play money

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
2. Discuss items that are basic to a weekly budget.		
3. Take a field trip to a local grocery store to see how goods are priced, stocked, delivered, etc. Possibly have students purchase some things. Have them check their change.		
4. If possible, go to a local grocery warehouse.		
5. Read other parts of newspaper for a language arts activity.		

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To make school subjects more meaningful

SPECIFIC BEHAVIORAL OBJECTIVE: To enhance mathematical interest by solving two written problems dealing with athletics

SUGGESTED SUBJECT AREA Math

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Exercises relating math to sports. ✓	1. These exercises may be used to integrate or expand mathematical concepts. This may be done as an individual, group, or class activity.	The resource material is found in the following activity sheets. * Excerpts taken from Math in Sports. Department of Public Instruction, M. F. Peterson, Superintendent Compiled in booklet form by George Fors, Math Consultant, Department of Public Instruction

SUGGESTED CORRELATION FOR THIS ACTIVITY:

The Astrodome, which is located in Houston, Texas, is the home of the Houston Astros baseball team. It is often referred to as the "8th Wonder of the World."

1. a) The annual average attendance at the Astrodome is the same as the sum of the average annual attendance at these places:

Paris' Eiffel Tower	1,750,000
New York's Empire State Building	1,500,000
Washington's Smithsonian Institute	1,250,000

What is the attendance at the Astrodome?____________________

b) How many more people come to the Astrodome than the Los Angeles Dodgers' Stadium if the attendance at the Dodgers' is 3,250,000?____________________

2. The Astrodome has 45,000 seats for baseball and 52,000 seats for football.

a) If each seat for baseball sold for $3.50, how much money would be taken in if all the seats were filled for a certain baseball game?____________________

b) If each seat for football sold for $2.00, how much money would be taken if all the seats were filled for a certain football game?____________________

c) How much more money can be taken in at the baseball game than the football game?____________________

3. If the area playing field of the Rome Colosseum is about 42,000 sq. ft., and that of the Astrodome is about 125,000 sq. ft., how many times larger is the Astrodome playing field as compared to the Rome Colosseum?____________________

4. To reduce the acoustical problem in the Astrodome, the underside of each of the stadium's seats was perforated with 1,078 holes. How many perforated holes are there in 45,000 seats?____________________

5. With the Astrodome stadium being in use about 15 days per month, the electrical bill will run to more than $30,000 per month. What would be the average electrical bill for the stadium for being used two days?____________________

Most of the activities in this section are based on the statistics compiled by high school basketball teams. The statistics of your local team could easily be used to replace the data given here. Note that most of the problems could be used with either the statistics recorded for one game or for a season.

This section also includes work on measurement, conversion, volume, area, a good deal of per cent, and work with units of time.

29b

BASKETBALL

Basketball is said to be the most all-American sport.

Dr. James Naismith is given credit for inventing the game in 1871.

Two peach baskets were put up on opposite ends of a gym. Naismith threw in a soccer ball to play with--and basketball was born.

Maximum dimensions for a basketball floor are 94 X 50 feet.

Minimum dimensions are 74 X 42 feet.

An official basketball is about 30" in circumference and weighs 20 to 22 ounces.

The baskets are 10 feet above the floor.

The metal baskets are 18" in diameter.

Two points are scored for a field goal. (f.g.)

One point is scored for a free throw. (f.t.)

Both boys and girls high school games are played in 4 eight minute quarters. College games are played in 2 twenty minute halves, and professional basketball is played in 4 twelve minute quarters.

Intermission between quarters (high school) is one minute and ten minutes between halves.

The boys' game requires 5 players and a girls' game requires 6 players.

WHAT DO YOU THINK? (Choose the best possible answer.)

1. Basketball was invented: a) more than 100 years ago, b) less than 100 years ago, c) exactly 100 years ago. _____

2. The baskets are a) less than 3 yards above the floor, b) more than 3 yards but less than four yards above the floor, c) more than four yards above the floor. _____

3. A doorway should be a) 85" high, b) 82" high, c) 88" high if "Wilt the Stilt" Chamberlain could walk through it without stooping or bumping his head. (Wilt Chamberlain is 7' 1" tall.) _____

4. A basketball weighs about a) 1 1/4 pounds, b) 1 3/4 pounds, c) 1 pound. _____

5. The area of a maximum sized basketball floor is a) 4700 feet, b) 4700 square yards, c) 4700 square feet. _____

6. The area of the minimum sized basketball floor is a) 3108 square feet, b) 3008 square feet, c) 3208 square feet. _____

7. In order to run a mile you would have to run a) 18 laps, b) 22 laps, c) 19 laps around the maximum sized floor. _____

8. You would have to run a) 23 laps, b) 22 laps, c) 24 laps around the minimum sized floor in order to run a mile. _____

9. If there were no "time-out" periods other than the breaks at the end of the quarters and the half, how long would a basketball game last? a) 50 minutes, b) 38 minutes, c) 44 minutes. _____

10. How many minutes of actual playing time in a junior high basketball game? a) 16 minutes, b) 32 minutes, c) 64 minutes. _____

Note: Let students choose answers individually, then let them form a group and make group decisions. Compare results.

SUGGESTED ACTIVITIES

1. Make a scale drawing of a maximum sized basketball floor. A minimum sized floor. Use the scale 1" = 16 ft.

2. Measure your basketball floor. Find the area in square feet. Square yards. Find the perimeter of your floor. How many laps would you have to run around it in order to run a mile?

3. Measure the height of your classroom door. Could "Wilt the Stilt" Chamberlain walk through it without stooping or bumping his head?

4. Measure the length of your bed. Could Wilt Chamberlain sleep in it stretched out full length?

5. Wilt Chamberlain scored 100 points in one game. Follow your favorite college or professional team and see if anyone ties or breaks his record this season.

6. Do some research about your favorite players, past or present, to find some of their unusual feats.

7. Measure the following in the metric system.
   a. Length and width of basketball floor in meters.
   b. Height of basket above the floor in meters.
   c. Diameter of a basketball in centimeters.

BOWLING

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A. RULES

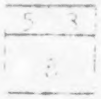
Although scoring looks complicated at first, actually it becomes easy if you remember and follow these simple rules:

1. Each game or "line" on the score sheet consists of 10 frames. Each box on the score sheet represents one frame.

2. The maximum number of balls rolled in each frame is two.

3. If you fail to topple all 10 pins with 2 balls, you simply record the number of pins you knock down on each roll.

   1st ball--5 pins knocked down
   2nd ball--3 additional pins
   knocked down



4. If you get a STRIKE (all 10 pins down with the roll of your first ball), you get a score of 10 in that frame plus the number of pins you knock down with your next 2 balls. The maximum score for any frame, therefore, is 30--representing 3 strikes in a row.

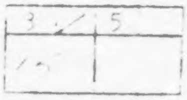
   A strike is scored by marking X as shown below:

   1st ball--strike
   2nd ball--strike
   3rd ball--strike

5. If you get a SPARE (10 pins knocked down on 2 rolls), you score 10 in that frame, plus the number of pins you knock down with your next ball in the next frame.

   A spare is scored by marking a / as shown below

   1st ball--3 pins
   2nd ball--remaining 7 pins
   (spare)
   3rd ball--5 pins

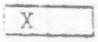


6. A SPLIT results if, on your first roll, you knock down the head pin and leave at least two pins standing while at least one of the pins normally placed between the standing pins is toppled.

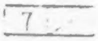
   A split is recorded by marking a) in the upper right corner of the frame on the score sheet. If, on your second roll, the remaining pins are toppled, the split is said to be "converted" and results in a spare. (See example for a converted split in "B" below.)

B. SCORING SHORTHAND

You keep score with these figures and symbols in the two small squares of each frame.

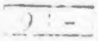


STRIKE



SPARE

CONVERTED SPLIT



MISS OR GUTTER BALL

1	2	3	4	5	6	7	8	9	10	TOTAL
5 3	6 /	6 /	X	1 6	X	X	3 3	8 -	X X X	
8	24	44	61	68	91	107	113	121	151	151

(5+3)	(10+6)	(10+10)	(10+7)	(7)	(10+10+3)	(10+3+3)	(6)	(8)	(20+10)
	8	24	44	61	68	91	107	113	121
	+16	+20	+17	+7	+23	+16	+6	+8	+30
	24	44	61	68	91	107	113	121	151

C. SCORING A TYPICAL GAME:

1st Frame: 5 pins fall down on first ball; 3 on second. A score of 8 for this frame.

2nd Frame: 6 pins down on first ball; 4 on next for a SPARE. Do not total the score yet; you still have a bonus to add from the first ball in the next frame. (Spare = 10 points + pins toppled by your next ball.)

3rd Frame: 6 pins on first ball. Now you can total the score for the 2nd Frame: 10 pins for the spare plus 6 for your bonus = 16. Add 16 to the 8 from the 1st Frame for a score of 24.

Second ball; you knock down all 4 remaining pins for another SPARE. Do not total the score for the 3rd Frame yet.

4th Frame: A STRIKE. Mark an X in the first small square of the 4th Frame and figure the score for Frame 3. 10 for spare + 10 for score on first ball in next frame = 20. Add 20 to the score of 24 = 44 for 3rd Frame.

5th Frame: 1 pin knocked down on first ball; 6 on second; 7 is then your bonus and you get 10 for the strike = 17 for the frame, a total of 61 for the 4th Frame. Now add the 7 pins you got in the 5th Frame for a total of 68 for the 5th Frame.

6th Frame: A STRIKE. Mark an X in first small square of 6th Frame, but do not total the score for the 6th Frame yet.

7th Frame: Another STRIKE. Mark an X in the 7th Frame. Do not total the score for Frames 6 or 7 yet.

8th Frame: 3 pins knocked down with first ball. Now you can complete score for 6th Frame: 10 for strike in 6th Frame + 10 and 3 for the scores of your next two balls = 23 in 6th Frame for total of 91.

3 pins down with the second ball. Now complete the score for 7th Frame: 10 for a strike + 6 for a bonus = 16 plus previous score of 91 = 107 for 7th Frame. Now, add 6 pins for the 2 balls in 8th Frame for a total of 113 in the 8th Frame.

9th Frame: 8 pins down on first ball; none on second, a MISS. 113 + 8 = 121 for 9th Frame.

10th Frame: STRIKE. Make an X. On the 10th Frame don't wait for your next turn to take your bonus rolls. You have a strike, so roll two extra balls. Strike on first bonus ball. Strike on second bonus ball. Now finish the score: 10 for strike in the 10th Frame + 10 for first bonus ball + 10 for second bonus ball = 30. Add 121 to 30. Total score for game = 151.

1. Fold this paper in half.
2. Score the top five games, then check your answers on the bottom of the sheet.

	NAME	1	2	3	4	5	6	7	8	9	10	TOTAL
1	Jim	4 3	7 2	- 6	1 8	7 /	8 1	X	4 5	4 /	3 5	
2	Jean	6 3	4 /	7 /	2 6	X	7 2	- /	X	3 5	4 / 7	
3	Frank	X	9 -	5 /	4 5	X	X	X	X	6 /	7 -	
4	Paul	X	X	4 /	4 5	X	X	X	X	4 3	7 / X	
5	Your Name	7 /	X	X	4 5	X	X	3 /	X	X	X 7 /	

	NAME	1	2	3	4	5	6	7	8	9	10	TOTAL
1	Jim	4 3	7 2	- 6	1 8	7 /	8 1	X	4 5	4 /	3 5	
		7	16	22	31	(10+8) 49	58	(10+4+5) 77	86	(10+3) 99	107	107
2	Jean	6 3	4 /	7 /	2 6	X	7 2	- /	X	3 5	4 / 7	
		9	(10+7) 26	(10+2) 38	46	(10+7+2) 65	74	(10+10) 94	(10+3+5) 112	120	(10+7) 137	137
3	Frank	X	9 -	5 /	4 5	X	X	X	X	6 /	7 -	
		(10+9) 19	28	(10+4) 42	51	(10+10+10) 81	(10+10+10) 111	(10+10+6) 137	(10+10) 157	(10+7) 174	181	181
4	Paul	X	X	4 /	4 5	X	X	X	X	4 3	7 / X	
		(10+10+4) 24	(10+10) 44	(10+4) 58	67	(10+10+10) 97	(10+10+10) 127	(10+10+4) 151	(10+4+3) 168	175	(10+10) 195	195
5	Your Name	7 /	X	X	4 5	X	X	3 /	X	X	X 7 /	
		(10+10) 20	(10+10+4) 44	(10+4+5) 63	72	(10+10+3) 95	(10+10) 115	(10+10) 135	(10+10+10) 165	(10+10+7) 192	(10+10) 212	212

*Note: The numbers in parentheses have been included to help explain the scoring.

From the information given below, determine the scores for Tom, Nancy, Chuck and Karen. Put your name in the last line and determine your score.

	NAME	1	2	3	4	5	6	7	8	9	10	TOTAL
11	Tom	X	X	4 /	- 8	9 /	4 -	2 5	X	3 /	8 1	
12	Nancy	4 5	6 ①	1 7	9 -	- -	4 4	1 8	9 -	5 /	4 3	
13	Chuck	8 /	X	4 2	X	6 3	4 /	3 3	8 ①	7 -	- / 8	
14	Karen	9 /	X	X	4 /	3 4	4 -	9 /	8 1	X	4 2	
15	Your Name	X	X	X	4 /	7 1	X	X	X	5 2	7 / X	

Make your own score. Have a partner check it.

16												
17												
18												
19												
20												

The section on golf provides a great deal of drill on averages, scale drawings, and per cent. A suggestion to supplement the geometry in this section is to ask individuals to make a scale of a local course and have the class answer pertinent questions regarding the course and the records of local golfers.

URSKUL GOLF AND COUNTRY CLUB

Score Card

Hole	Yards	Par
1	447	4
2	340	4
3	297	4
4	210	3
5	363	4
6	510	5
7	481	5
8	328	4
9	175	3
Total		

PAR - The number of strokes, based upon the length of each hole that is set as a player's goal.
BIRDIE - One stroke less than par.
EAGLE - Two strokes less than par.
BOGIE - One stroke more than par.
DOUBLE BOGIE - Two strokes more than par.

Using the information given above, answer the following questions:

1. What is the total length of this course in yards? __________

2. If a player two-putts every green, what is the minimum distance his fairway shots must average on each hole in order for him to par each hole? birdie each hole? bogie each hole?

Hole	Par	Bogie	Birdie
1			
2			
3			
4			
5			
6			
7			
8			
9			

3. If a player parred the course, what would be his total score? __________

Given below are the leading golf money winners from years 1960 - 1967.

Leading Money Winners

1960	Arnold Palmer	$ 75,263	1964	Jack Nicklaus	$113,284
1961	Gary Player	64,540	1965	Jack Nicklaus	140,752
1962	Arnold Palmer	81,449	1966	Billy Casper	121,944
1963	Arnold Palmer	128,230	1967	Jack Nicklaus	188,998

1. What are the total winnings of these eight players?

2. What are their average winnings?

3. How much below or above the average was each player?

Above or Below

Arnold Palmer ______ ______
Gary Player ______ ______
Arnold Palmer ______ ______
Arnold Palmer ______ ______
Jack Nicklaus ______ ______
Jack Nicklaus ______ ______
Billy Casper ______ ______
Jack Nicklaus ______ ______

4. If 1/4 of their winnings were paid out in taxes, how much would each pay?

Arnold Palmer __________
Gary Player __________
Arnold Palmer __________
Arnold Palmer __________
Jack Nicklaus __________
Jack Nicklaus __________
Billy Casper __________
Jack Nicklaus __________
TOTAL __________

5. If their expenses (food, travel, etc.) amounted to 1/3 of their winnings, how much would each pay for expenses?

Arnold Palmer __________
Gary Player __________
Arnold Palmer __________
Arnold Palmer __________
Jack Nicklaus __________
Jack Nicklaus __________
Billy Casper __________
Jack Nicklaus __________
TOTAL __________

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U. S. OPEN

1960	Arnold Palmer	[illegible]	1965	Gary Player	282
1961	Gene Littler	[illegible]	1966	Billy Casper	278
1962	Jack Nicklaus	[illegible]	1967	Jack Nicklaus	275
1963	Julius Borros	29[illegible]			
1964	Ken Venturi	[illegible]			

The U. S. Open winning scores for the years 1960 through 1967 given above are for 72 holes played.

1. Which of the players averaged more than 4 strokes per hole? __________________ Which of the players averaged less than 4 strokes per hole? ____________________

	Average	
	More than 4	Less than 4
Arnold Palmer		
Gene Littler		
Jack Nicklaus		
Julius Borros		
Ken Venturi		
Gary Player		
Billy Casper		
Jack Nicklaus		

2. What was the average winning score for these eight years?

____

- -

U. S. WOMEN'S OPEN

1960	Betsy Rawls	291	1965	Carol Mann	290
1961	Mickey Wright	293	1966	Gloria Ehret	282
1962	Mrs. Murle Lindstrom	301	1967	Catherine Lacoste	294
1963	Mary Mills	289			
1964	Mickey Wright	290			

The U. S. Women's Open winning scores given above are for 72 holes played.

1. What was the average winning score for these eight years?

____

2. What was each player's average score per hole?

Average			
Betsy Rawls		Carol Mann	
Mickey Wright		Gloria Ehret	
Murle Lindstrom		Catherine Lacoste	
Mary Mills			
Mickey Wright			

3. What was the difference between the lowest and highest score for women given? ______________

4. Patty Berg, one of the great favorites of women golfers, once played an 18 hole round of 64 in competition, a record not yet matched. What was her average per hole? ______________

5. Had Miss Berg played the above match on the Urskul Course, how much above or below par would her score have been?

____

6. How much lower was the average winning score for the men's open than for the women's open?

____

1. On the Urskul Golf Course, drawn on the preceding page, hole 5 doglegs to the right. What is the measurement of this angle in degrees? __________

2. What is the perimeter of this golf course? __________

3. If fencing cost 65¢ per yard, what would be the total cost of fencing the course? __________

4. What is the area of the course in square yards? __________

5. What is the area of the parking lot? __________

6. If it costs 30¢ per square yard to surface the parking lot, what would be the total cost of surfacing it? __________

7. If the parking lot is located at equidistant from each side of the course, how far is it from the N.E. corner of the parking lot to the S.E. corner of the course? __________

8. If a player walked diagonally across the course from the S.W. corner of the course to the N.E. corner of the course, about how many yards would he walk?
__________ about 1200 yds.
__________ less than 1500 yds. (>1200 yds.)
__________ more than 1900 yds.

- -

1. In 1963 there were 6,250,000 golfers in the U. S. that played 15 or more rounds of golf per year. It is estimated that by 1970 there will be 12,000,000 golfers playing 15 or more rounds per year. What would be the total increase in golfers over this 7 year period? __________

2. Assuming they average 25 rounds per year and the cost per round was $2.00, what would be the total cost for all golfers in the U. S. for 1963? __________ for 1970? __________

3. In 1947 there were 4,870 golf courses in the U. S., in 1963 7,500, and it is estimated there will be 11,000 by 1970. What is the total increase from 1947 to 1970? __________ from 1963 to 1970? __________

4. What was the average number of golfers per course in 1963? __________ in 1970? __________

5. In 1960, 36,000 high schools had golf teams. In 1963, there were 78,000 high schools which had teams. What was the increase during this period? __________

6. What per cent of increase was this? __________

TRACK

The track section includes conversion of units of measure, the rate, time, and distance relationship, and averaging.

A possible research exercise to be used while the Olympics are in progress is to have a student (or students) find and report on the Decathlon event, its component events, scoring, and records. The method of scoring could provide a good exercise in averaging. Track buffs in class might suggest a scoring scheme for a high school decathlon event based on state or conference high school records.

1. An outdoor track in the U. S. measures 440 yeards one foot in from the inner circumference.

440 yd. = __________ ft.
440 yd. = __________ in.

2. Indoor tracks seldom measure more than 220 yards.

220 yd. = __________ ft.
220 yd. = __________ in.

3. In a relay race, four runners run equal distances for a total of one mile.

1 mile = __________ ft.

What part of a mile did each runner run? __________
How many feet did each run? __________
How many yards did each run? __________

4. Until 1961 nine sprinters shared the world record for the 100 yard dash in 9.3 seconds. How many yards per second did they run? __________

5. Bob Hayes lowered the record to 9.1 seconds in 1963. How many yards per second did he run? __________

6. In a two mile relay race there were four runners. What part of a mile did each run (if each ran an equal distance)? __________
How many feet did each run? __________
How many yards did each run? __________

7. An athlete at the Drake Relays threw the discus the following distances. Find the average distance. 165 ft., 172 ft., 191 ft.,
__________ 167 ft., and 170 ft.

8. Change the following meter runs to feet.

> Note: 1 meter = approx. 3.2808 ft.
> 1 meter = approx. 1.0936 yds.
> ≈ means "approximately equal to"

100 meters ≈ __________ ft.
200 meters ≈ __________ ft.
400 meters ≈ __________ ft.
800 meters ≈ __________ ft.
1500 meters ≈ __________ ft.
5000 meters ≈ __________ ft.
10000 meters ≈ __________ ft.

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To make school subjects more meaningful

CONCEPT: Advances in science have altered the occupations that produce goods and occupations that produce services. Having a scientific attitude (problem solving) helps people in their work.

SPECIFIC BEHAVIORAL OBJECTIVE: After completion of each science unit studied each student will be able to list three occupations related to the unit.

SUGGESTED SUBJECT AREA Science

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Discussion of occupations related to science unit. Field trip Resource person	As each science unit is completed, occupations related to that field may be interwoven through discussion, field trips or a resource person coming into the classroom.	Science textbook Library books

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CARLER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To present appropriate occupational information using a broad introduction of occupations throughout the world.
CONCEPT: To expand concept specialization leads to interdependency.
SPECIFIC BEHAVIORAL OBJECTIVE: Student will list at least three jobs related to sound.

SUGGESTED SUBJECT AREA Science

SUGGESTED GRADE LEVEL 6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Have a few students interview a music teacher and find out how their job is related to sound. 2. Have a speech therapist or speech teacher come into the classroom to explain how their job is closely related to sound. 3. Visit a building supply company to find out about sound proofing materials.	Discuss how sound plays a very important part in our lives. How? Have students tell about some workers who are very closely involved with sound. Discuss noise pollution problems we have in the world today.	Texts Library books Resource people - Bell Telephone Co. filmstrips opaque projector for pictures 16mm film from Northwest Bell Telephone A sense of Hearing #796 - 10 min Song: Randu to Andrew p. 215 Electronic Computer Mastering Music - ABC

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To present appropriate occupational information using a broad introduction of occupations throughout the world.

SPECIFIC BEHAVIORAL OBJECTIVE: Students will be able to list three occupations associated with jet transportation.

SUGGESTED SUBJECT AREA Science

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Discuss various occupations that result from the use of jet engines in commercial flights.	1. Allow students to bring models of various airplanes. Also, if possible, have a dress-up day where the students would be able to model clothes worn by the pilot, stewardess, etc.	Filmstrips: 141-5 Airport Workers Imperial Film Co. Jet Propulsion MDU 131-D Aviation in Space Age Eye Gate House
2. A few of the occupations are as follows: aircraft mechanic, airline reservation agent, co-pilot, stewardess, air traffic controller, flight engineer, pilot, ground maintenance crew, baggage men, radio-operator dispatcher.	2. Review different types of airplane engines in comparison to the jet engines. Use the overlays to demonstrate the use of the three basic jet engines.	Books: The Making of a Pilot Ed Nicher, Westminister Press, Philadelphia, PA 1966 What Does an Airplane Crew Do E. Roy Ran, Dodd, Mead and Co., New York 1968
3. If possible, make arrangements for a field trip to an airport at an appropriate time to observe a ground crew in action.	3. Read the attached excerpt on "The Making of a Pilot" to the class. Review the jobs of the flight crew and ground crew mentioned in the reading. Perhaps some youngsters can think of additional tasks needed to be completed by both crews.	Handbook of Job Facts, SRA 1968 Occupational Information, SRA 1968 Occupations and Careers S. Norman Feingol and Sol Swerdloff, Webster Division, McGraw-Hill Book Co., 1969
	4. Overlays accompanied by explanation are provided for teachers who wish to show the functioning of the jet engine. (This knowledge is pertinent to members of a flight crew.)	Films: An Airplane Trip by Jet 1918 Jet Pilot - Our Shrinking World 2210

SUGGESTED CORRELATION FOR THIS ACTIVITY:

WHERE AIRPLANE STEWARDESSES WORK

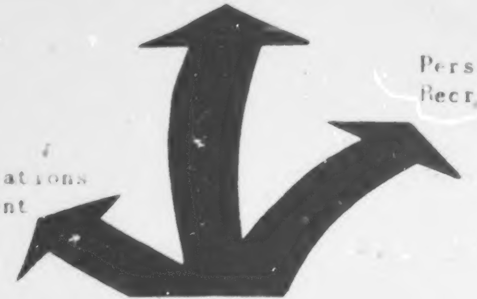
. Airlines, both domestic and international

HOW YOU CAN LEARN

- Schools run by the airlines
- Private schools

RELATED JOBS

Airplane Stewardess, Chief



Personnel Recruiter

Reservations Agent

Airplane Stewardess

Good work habits developed on this job will lead to better jobs, as shown above.

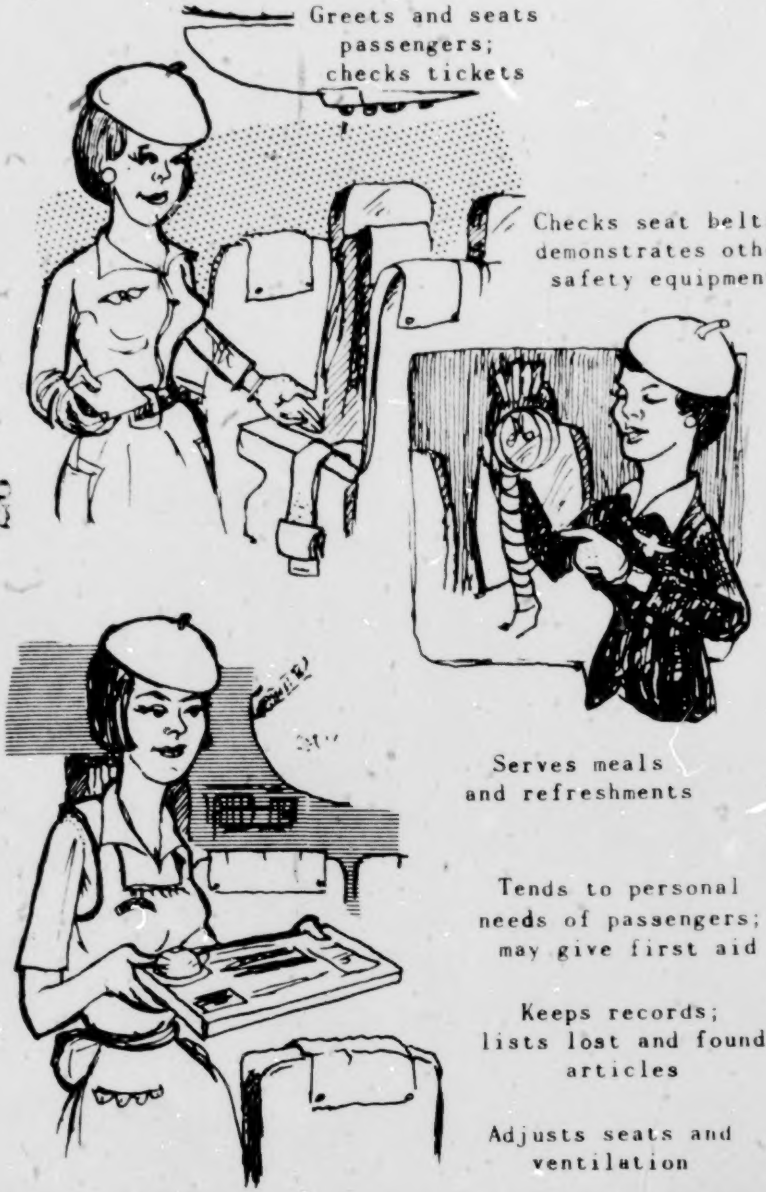
FOR MORE DETAILS GO TO:

D.O.T.
352.878

AIRPLANE STEWARDESS

WATCH
YOU
S
SEYMOUR AIR WAYS

AN AIRPLANE STEWARDESS



Greets and seats
passengers;
checks tickets

Checks seat belts;
demonstrates other
safety equipment

Serves meals
and refreshments

Tends to personal
needs of passengers;
may give first aid

Keeps records;
lists lost and found
articles

Adjusts seats and
ventilation

AN AIRPLANE STEWARDESS SHOULD

Be in excellent health
Be at least 19 years old
Be between 5'2" - 5'9" in height
Weigh no more than 140 pounds
Have at least 20/50 vision
Have a good complexion
Be very well-groomed and poised
Enjoy traveling and helping people
Be at least a high school graduate

$$$ THE PAY $$$

THE HOURS

. About 85 hours a month in the air and 35 hours in ground duties
. Will include night, holiday, and weekend hours

Extras You MAY Get

. Paid vacations
. Sick leave
. Free life insurance
. Meals & lodging
. Uniforms
. Free flying privileges for yourself & family

The Making of a Pilot

"I spent a whole day watching TWA ground crews operate at an East Coast airport. Three men handled fuel and water (for the water-injection models of the Boeing 707 jet). Five men worked getting baggage off the airplane and new baggage loaded. One man handled the commissary supplies. Two men cleaned the cabin. Three transportation agents were busy with passengers' details. There were nineteen people working on that one flight. They loaded 2,000 gallons of fuel and 371 gallons of demineralized water (processed right at the airport). They supervised the stacking of more than a hundred meals. They made certain that film was on board for in-flight movies. They checked everything from carpeting to coffee, from tires to tea bags. And they did it so quickly that it would have required three men to watch without missing anything.

It takes 150 ground people at that one station to service some twenty flights a day.

They put the airplane in ready condition. And then the flight crew takes over. Hostesses buzz about the cabin, checking needed supplies. The flight engineer makes an exhaustive preflight check. The first officer (co-pilot) files a flight plan and checks enroute weather, radio frequencies, traffic routing, and myriad other details. The captain, responsible for it all, double checks everybody else. It is he who must accept or reject the planned route and its details. He must be satisfied with his flight engineer's assurances and with his first officer's calculations. He knows exactly how many people are on board, how much the fuel weighs, how fast the airplane will have to be moving before it will lift off. He knows where they'll go if weather intervenes at the other end of their trip. He knows how much fuel they'll have to turn getting there, or to a second alternate field."

Richter, Ed. The Making of a Pilot. (Westminister Press: Philadelphia, Penn. 1966) pp. 76-77

BASIC STEPS OF HOW THE THREE TYPES OF JET ENGINES WORK

(1) Ramjet

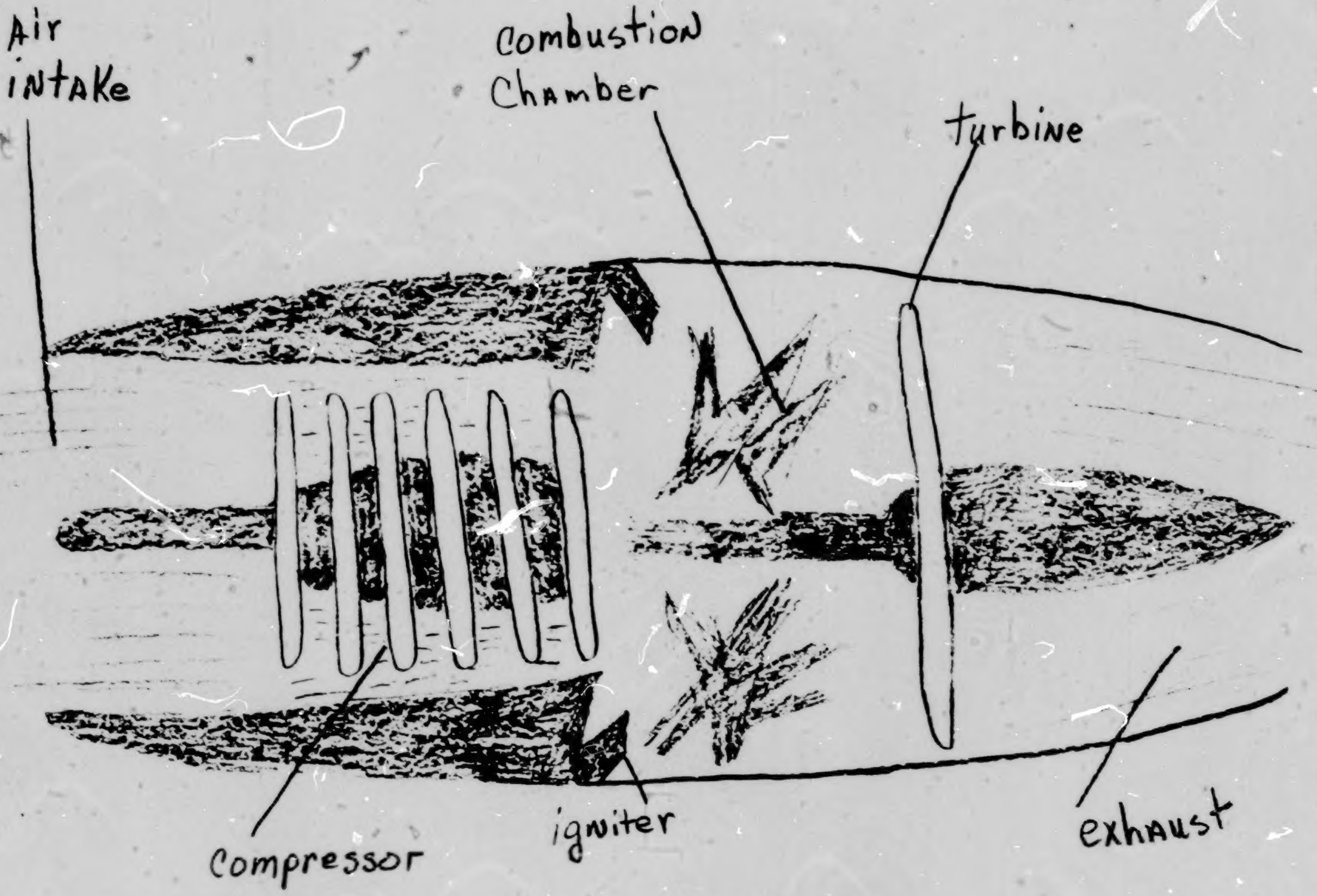
The air intake is designed in a special way to compress or squeeze the air. The air meets the airplane and then squeezes into the air intake where it is compressed. The compressed air moves into the combustion chamber where it mixes with fuel. The igniter ignites the fuel-air mixture causing an explosion forcing the gases to stream outward through the exhaust system. The plane is then forced in a forward motion.

(2) Turbojet

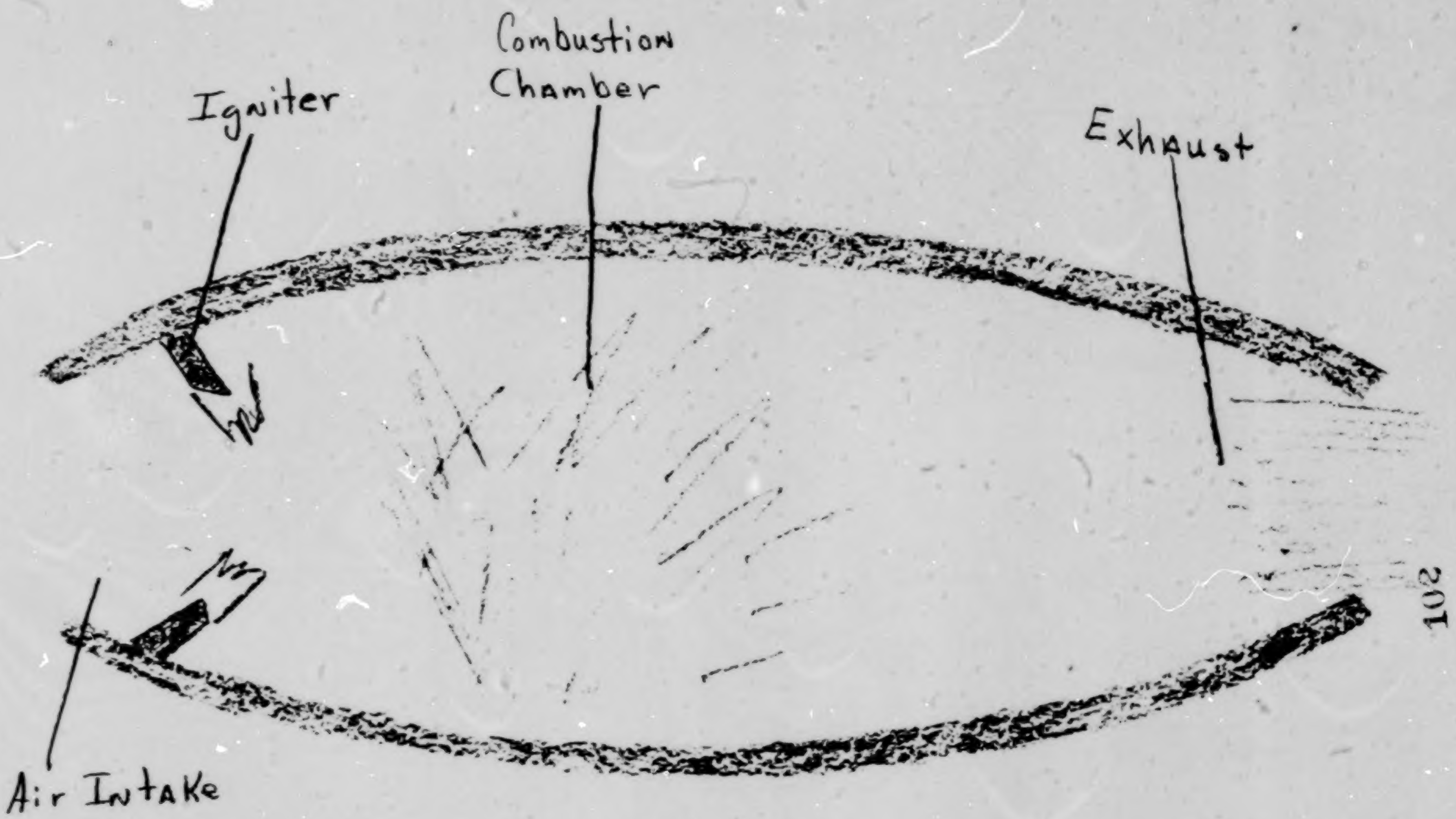
This is basically a gas turbine engine. Air enters into the air intake entrance passing through the compressor. After the air has been compressed by the compressor, it enters the combustion chamber where the fuel-air mixture explodes. From the combustion chamber the exhaust gases are forced through the turbine out the exhaust opening. The gases escaping after the explosion cause the turbine to spin--the faster the turbine spins, the faster the compressor spins. As the compressor turns faster, the more the air will be compressed causing the gases to escape through the exhaust opening at a greater velocity. Therefore, the airplane will move faster.

(3) Turboprop

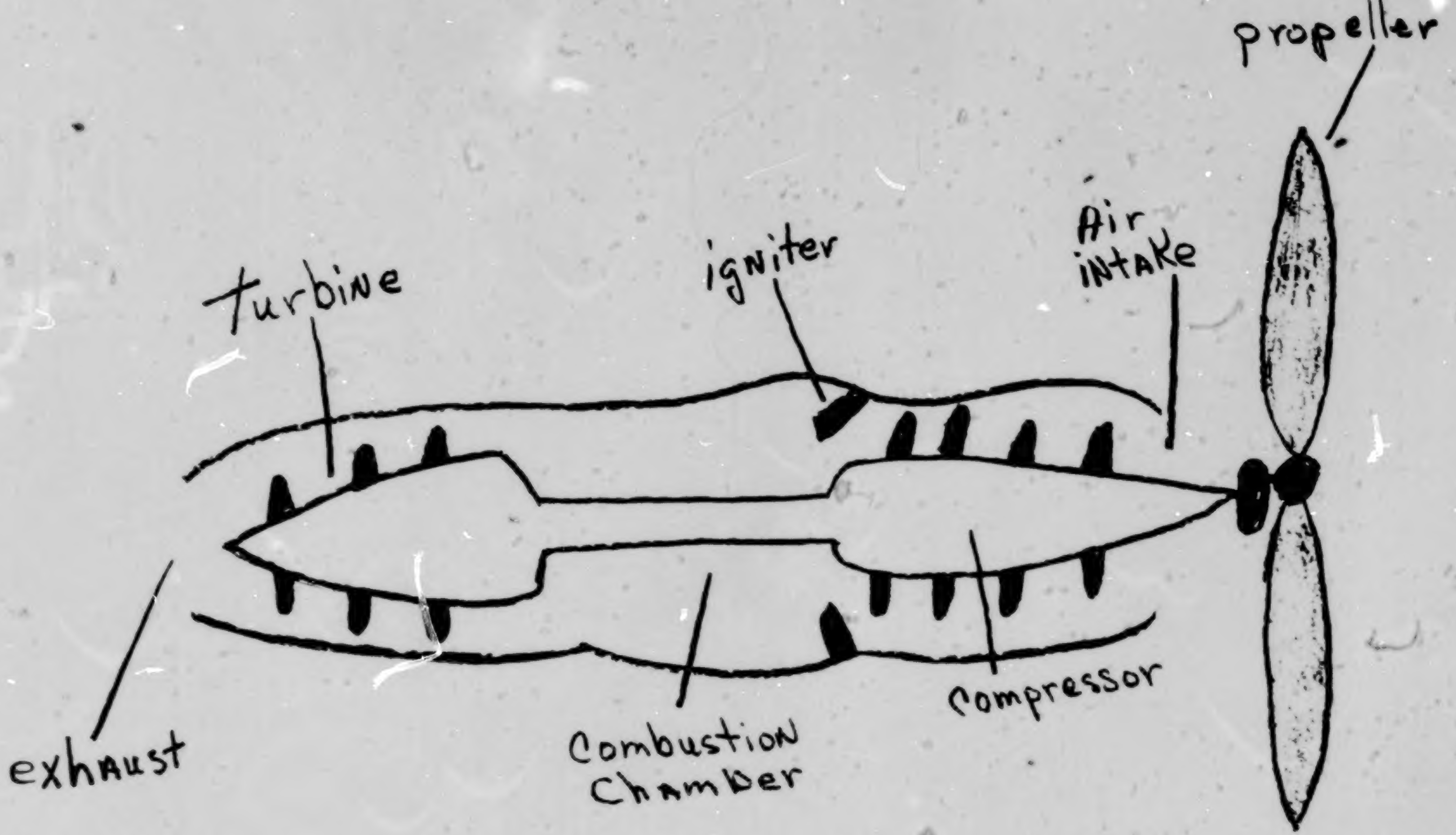
This engine also has a turbine and a compressor. In the turboprop the drive shaft has two basic jobs to do. It runs the compressor and also turns a propeller. Propellers provide most of the thrust in a turboprop; therefore, the engine is really not jet propelled. Exploding fuel-air mixture in the combustion turn the propellers that make the plane go.


Air intake
Combustion Chamber
turbine
Compressor
igniter
exhaust

Turbojet


Combustion Chamber
Igniter
Exhaust
Air Intake

Ramjet


propeller
Air intake
igniter
turbine
exhaust
Combustion Chamber
compressor

Turboprop

32h

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To present appropriate occupational information using a broad introduction of occupations throughout the world.

SPECIFIC BEHAVIORAL OBJECTIVE: Students will demonstrate his knowledge of relationship among industry, science, technology by listing an invention that has been developed as a result of the three areas.

SUGGESTED SUBJECT AREA Science

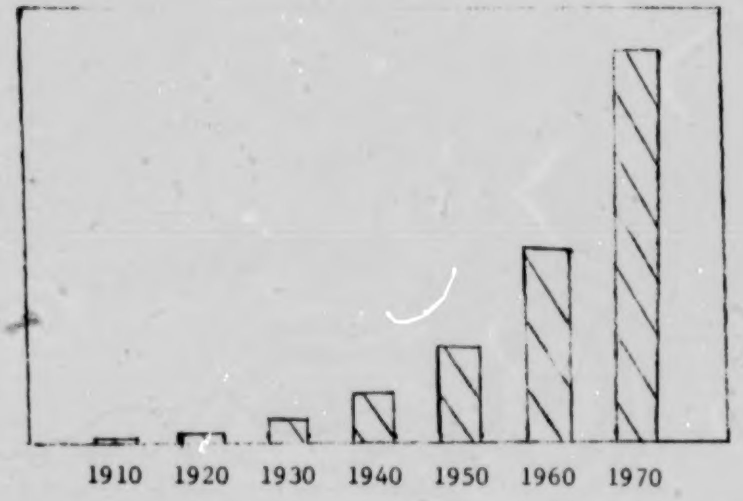
SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Discuss how the following played an important role in the development of the rocket engine: technician, engineer, scientist 2. An overlay is furnished to show advancement in technology, industry, and science.	1. The class may divide into three committees and investigate the following: a) scientists b) technicians c) engineers. Each committee may read resource materials and write letters to various foundations regarding careers related to their assigned topic. The committees will want to report their findings to the class. This may be done in the form of charts, reports, or other devices the teacher decides upon. 2. The students may read a variety of books on scientists and inventors who have had an impact on our lives. Brief oral reports will want to be given to the class by each student with an emphasis on the impact of the scientist's contribution(s) on the world of work. 3. Overlays of the rocket engines, along with a simple explanation of how they	*Educational Service Branch Office of Educational Programs and Service National Aeronautics and Space Administration Washington, DC Filmstrips with cassettes: Eye Gate House Inc. 131-A Pioneers of Space Age 131-B Exploration of Space Age 131-C Atoms in Space 131-D Aviation in the Space Age 131-E The Conquest of Space 131-F Man Travels in Space 131-G Hazards in Space Travel 131-H Destination in Space 131-I Stations on the Moon Into Space with the Astronauts, Robert Scharff, Grosset and Dunlap, 1965 What Does an Astronaut Do? Robert Wells, Dodd, Mead, and Company, 1961

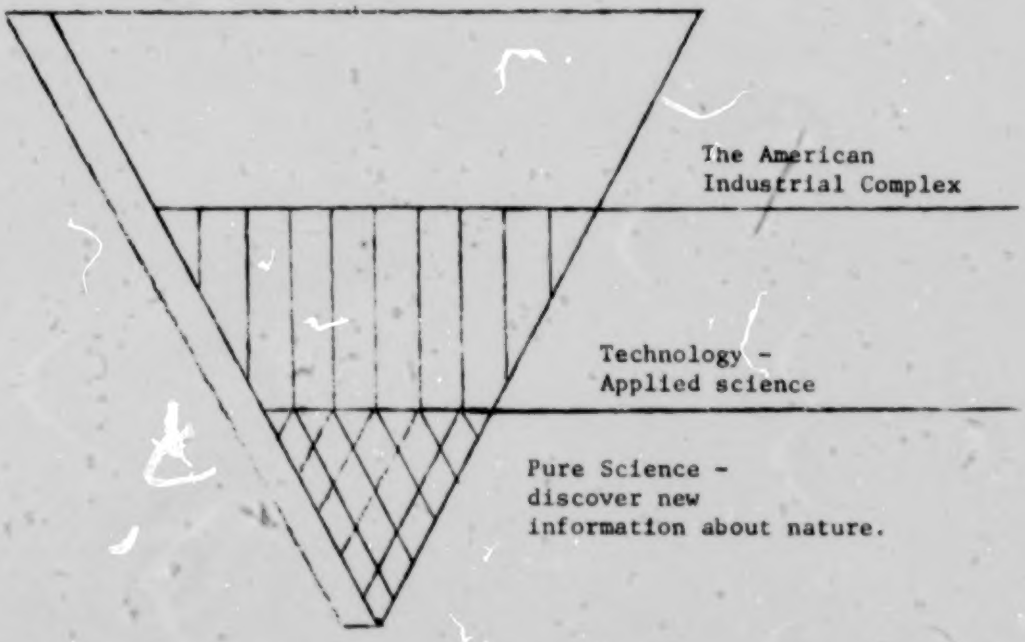
SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
	work is provided for the teacher. Discuss how scientists, technicians, and engineers played a role in development of the rockets.	Occupations and Careers, S. Norman Feingold and Sol Swerdloff, Webster Division, McGraw-Hill Book Co., 1969 *important material for this unit



Scientific and engineer population doubles every ten years.


The American
Industrial Complex
Technology -
Applied science
Pure Science -
discover new
information about nature.

The Relationship of Science to Industry*

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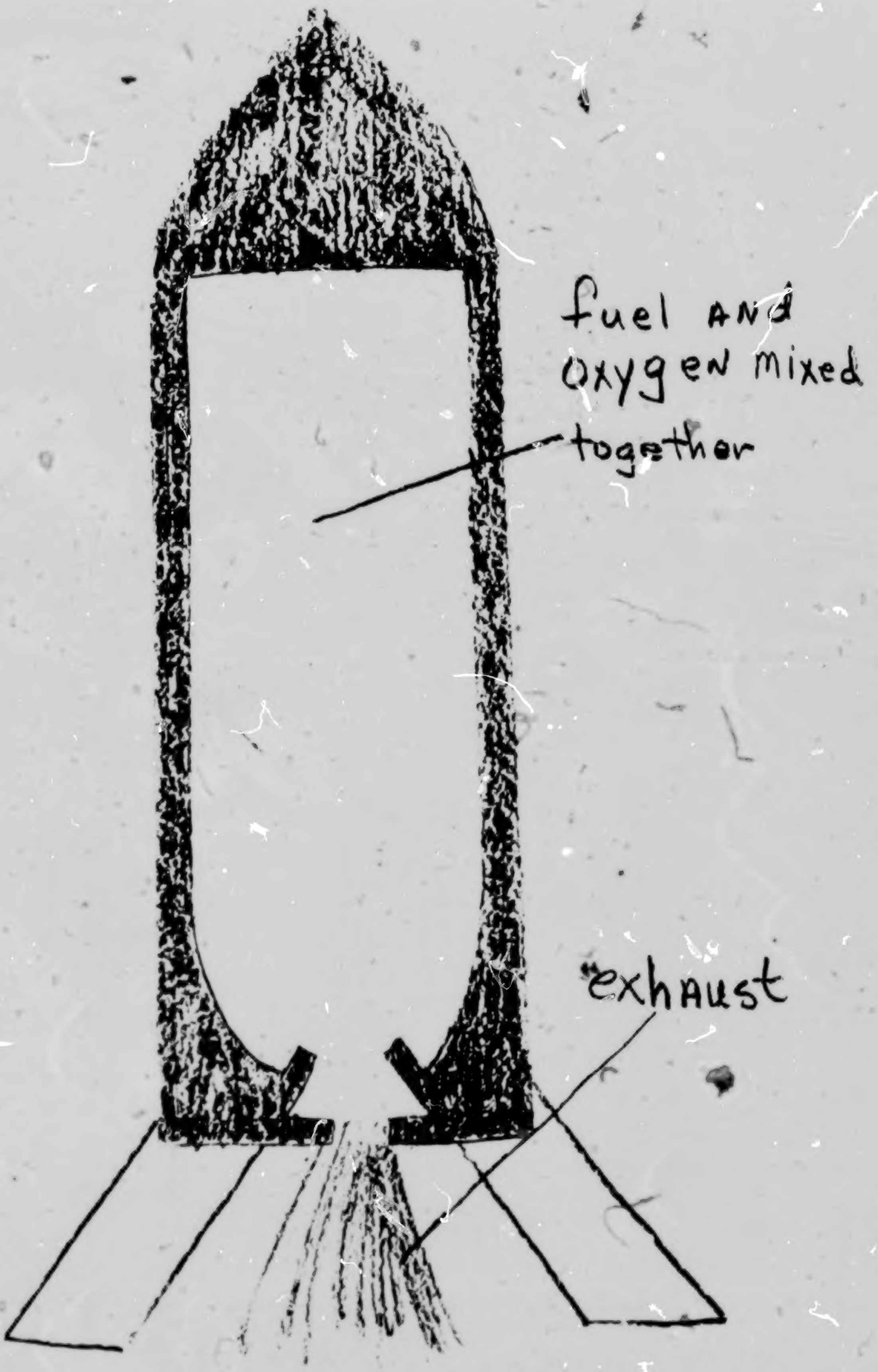
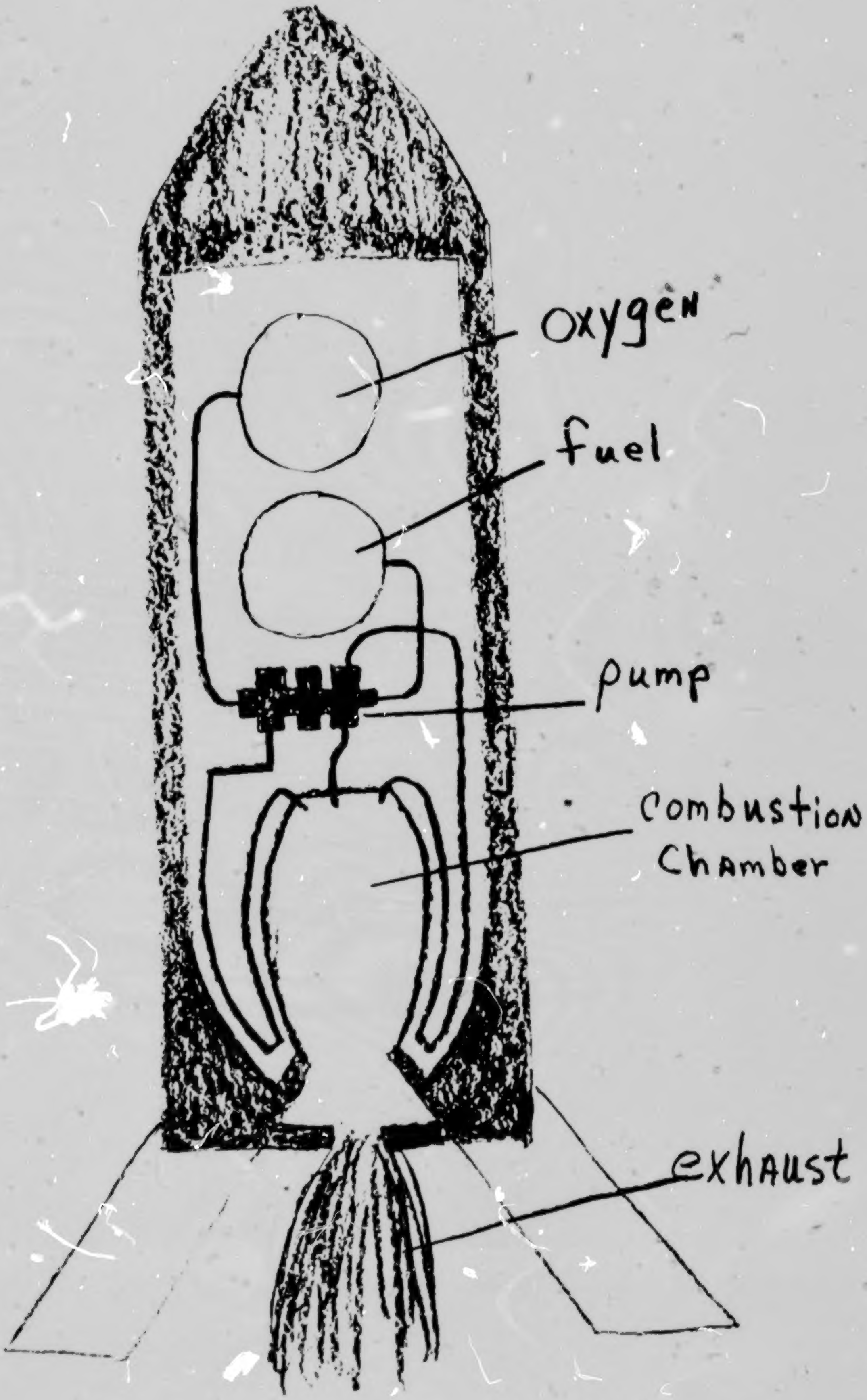
*From Teaching Science by Inquiring in the Secondary School, Sund, Robert B., et al, Charles E. Merill, Books, 1967, p. 14.

33b

Solid propellant


fuel and oxygen mixed together
exhaust

Liquid Propellant


oxygen
fuel
pump
combustion Chamber
exhaust

HOW THE LIQUID PROPELLANT AND SOLID FUEL ROCKETS WORK

Liquid Propellant Rocket

This rocket contains two tanks: a liquid oxygen tank and a fuel tank. A common rocket fuel is kerosene. Liquid oxygen and fuel are pumped into the combustion chamber where they mix together to form an explosion. The explosion forms exhaust gases that exit out the exhaust nozzle forcing the rocket forward. Liquid propellant rockets are used for manned space flights because the fuel system can be shut off and turned back on at any time.

Solid Propellant Rocket

A solid propellant rocket is literally one large combustion chamber. In this rocket fuel an oxygen are mixed together to form a plastic calk-like substance. The plastic fuel is made up of chemicals that contain oxygen. An ignition system ignites the fuel forcing the rocket forward. Once the fuel is ignited, it cannot be turned off. This type of rocket is an unmanned rocket used for satellite purposes.

WHERE ELECTRONICS ASSEMBLERS WORK

- Electronics Plants
- Aircraft Plants
- Missile Plants
- Business Machine Plants

HOW YOU CAN LEARN

- On-the-job
- MDTA classes
- Vocational schools
- Private schools

RELATED JOBS

Electronic Technician

Inspector, Components

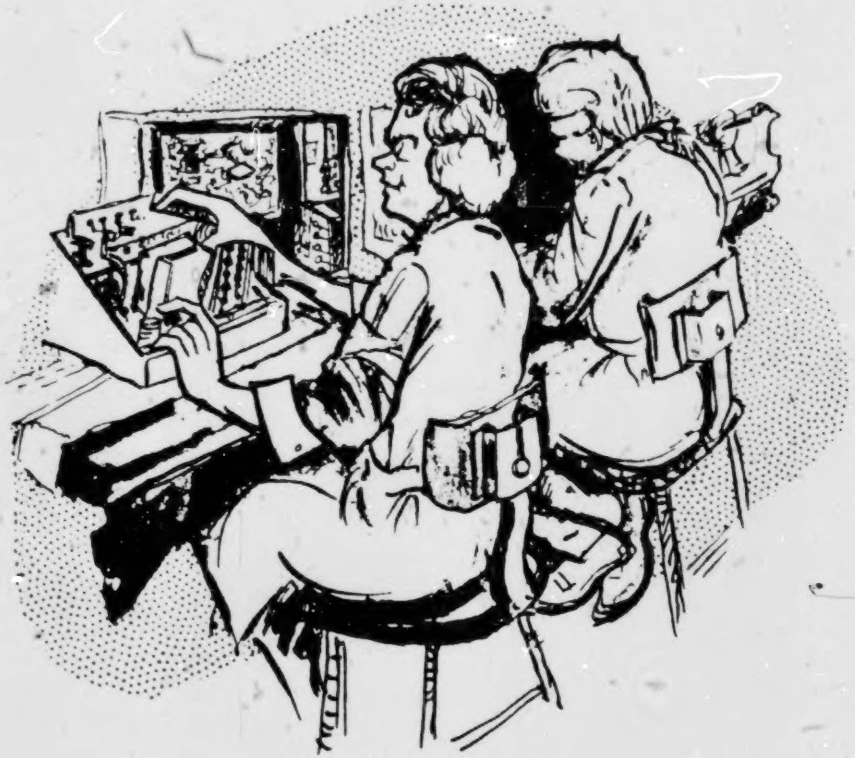
Tester, Electronic Components

Electronics Assembler

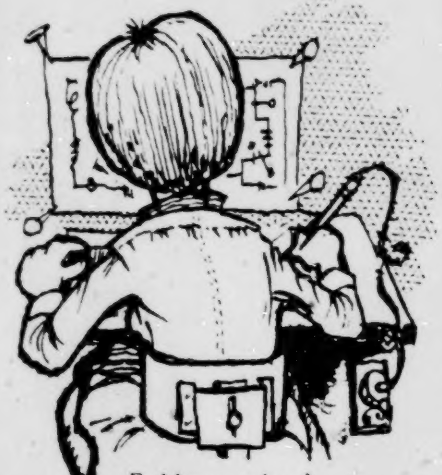
FOR MORE DETAILS GO TO:

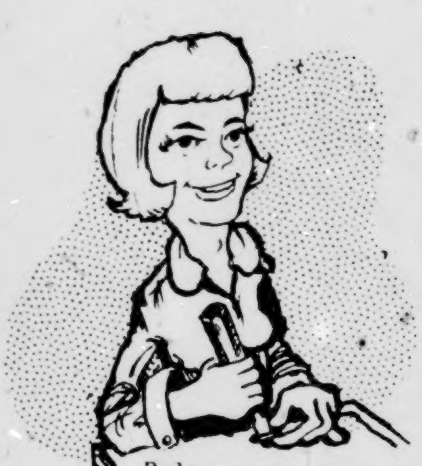
D.O.T.
726.781

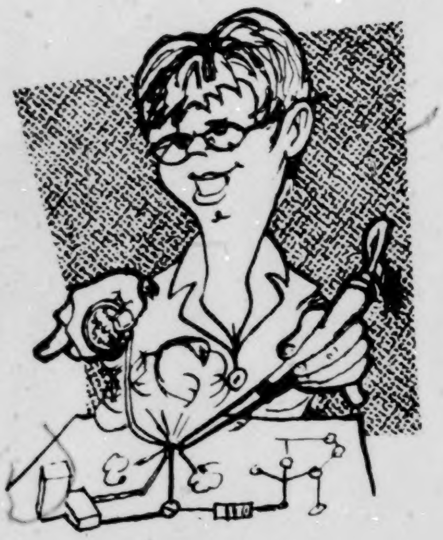
ELECTRONICS ASSEMBLER

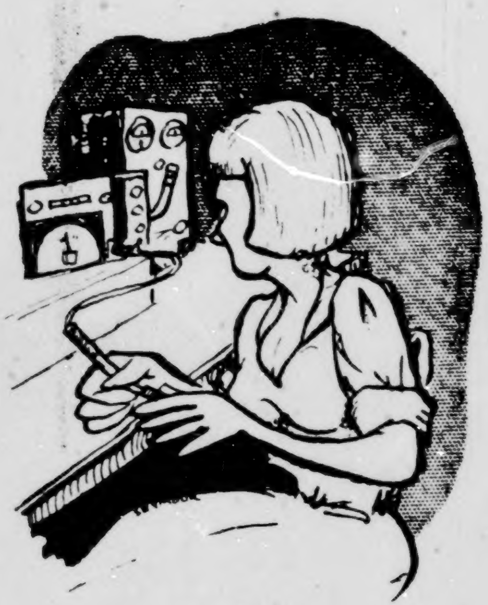


AN ELECTRONICS ASSEMBLER . . . . .


Follows simple drawings


Bolts or screws parts to frame


Wires circuits


Tests unit for shorts, etc.

AN ELECTRONICS ASSEMBLER SHOULD

- Be at least 18 years old
- Have good eyesight
- Not be color-blind
- Like working with small parts
- Work well with his hands

$$$ THE PAY $$$

THE HOURS

- Usually 40 hours a week
- May be night hours
- May work overtime

Extras You MAY Get

- Life and Health Insurance
- Pension Plan
- Paid Holidays
- Paid Vacations

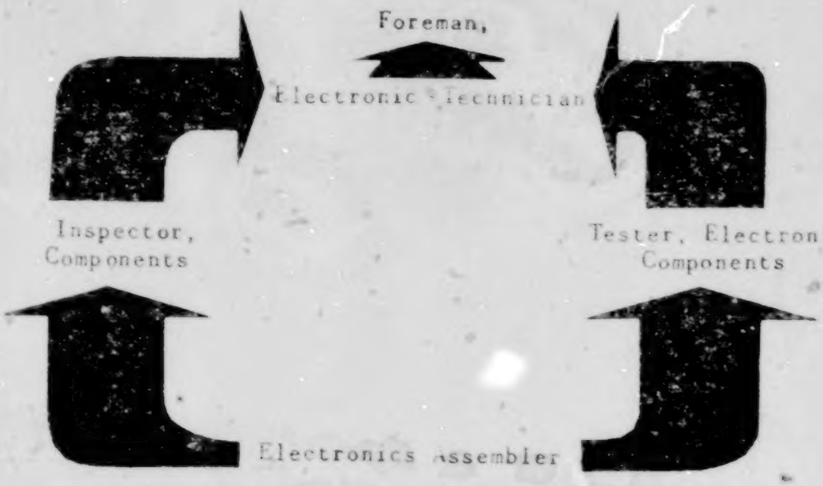
WHERE ELECTRONIC TECHNICIANS WORK

- Electronics Plants
- Aircraft Plants
- Missile Plants
- Business Machine Plants

HOW YOU CAN LEARN

- On-the-job
- MDTA classes
- Vocational schools
- Private schools

RELATED JOBS



Foreman,

Electronic Technician

Inspector, Components

Tester, Electronic Components

Electronics Assembler

FOR MORE DETAILS GO TO:

D.O.T.
003.181

ELECTRONIC TECHNICIAN

D.O.T.
017.281

JUNIOR DRAFTSMAN

WHERE A JUNIOR DRAFTSMAN WORKS

. Government - State,
Federal or Local

. Manufacturing plants, such as:

Machinery Electrical Equipment
Aircraft Transportation Equipment

. In these fields:

Agricultural
Petroleum
Electrical
Public Utility
Electronics
Title Insurance
Commercial
Plumbing

HOW YOU CAN LEARN

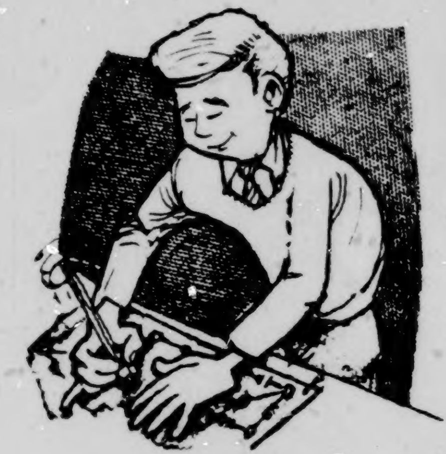
. On-the-job training
. MDTA classes
. Junior colleges
. Vocational schools

RELATED JOBS

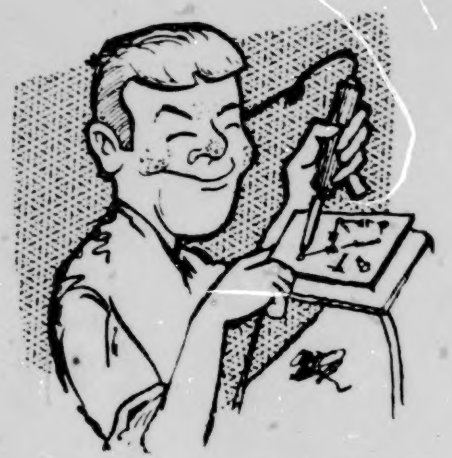
Senior or
Design Draftsman
↑
Junior
Draftsman
↑
Tracer

FOR MORE DETAILS GO TO:

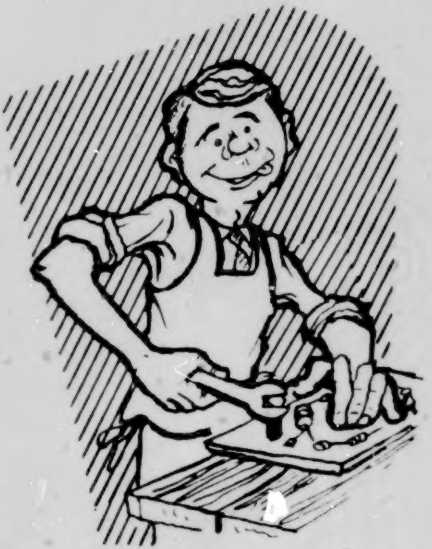
AN ELECTRONIC TECHNICIAN



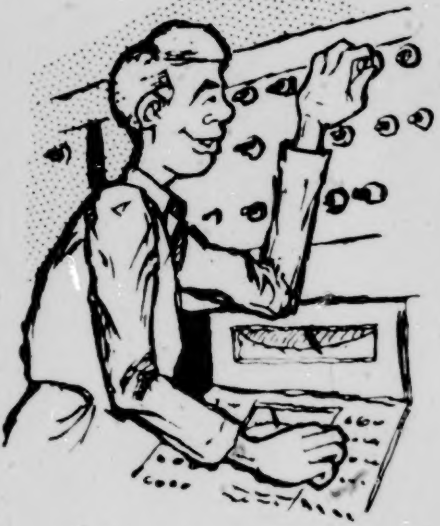
Reads blueprints and wiring diagrams



Wires circuits, using soldering iron



Bolts components to panel or cabinet, using handtools



Tests circuits for shorts

AN ELECTRONIC TECHNICIAN SHOULD

- Not be color-blind
- Like working with small parts
- Work well with his hands
- Must know electronic theory

$$$ THE PAY $$$

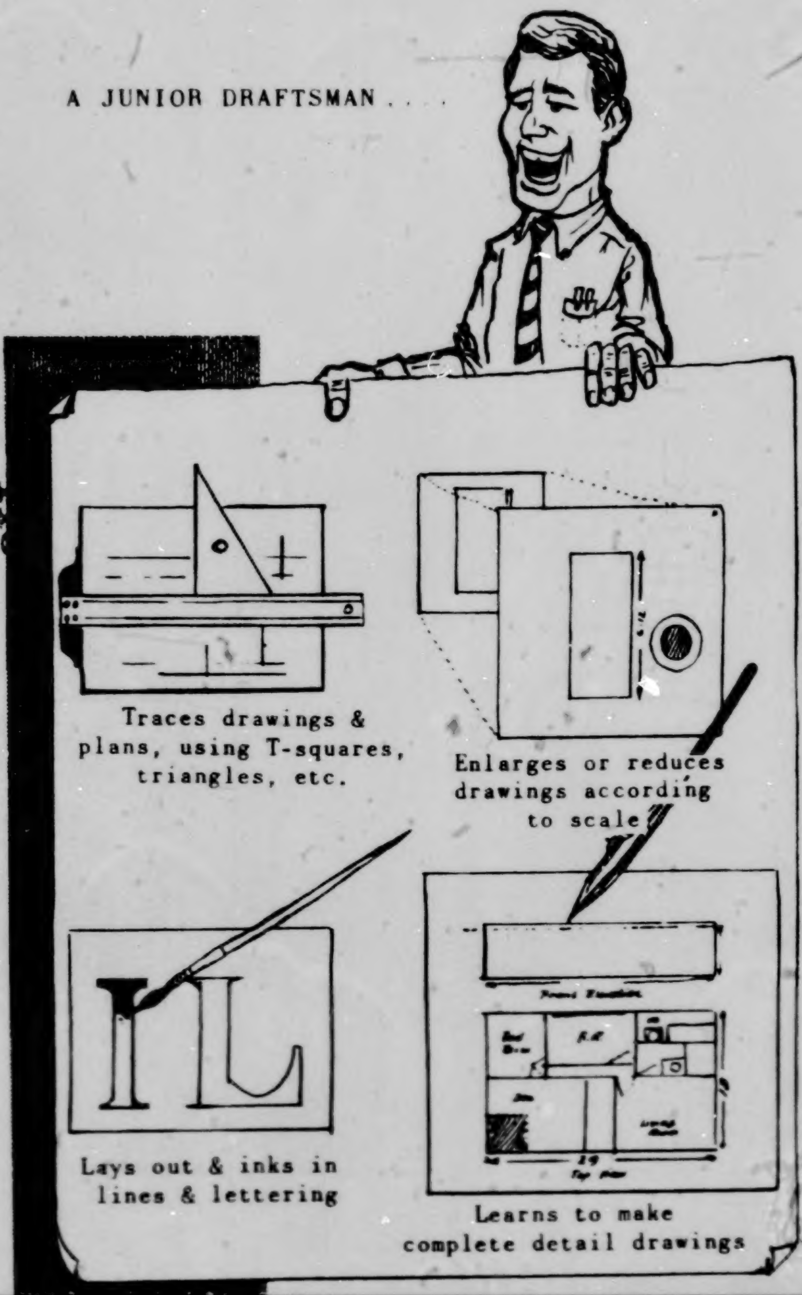
THE HOURS

- Usually 40 hours a week
- May be night hours
- May work overtime

Extras You MAY Get

- Life and Health Insurance
- Pension Plan
- Paid Holidays
- Paid Vacations

A JUNIOR DRAFTSMAN . . . .



Traces drawings & plans, using T-squares, triangles, etc.

Enlarges or reduces drawings according to scale

Lays out & inks in lines & lettering

Learns to make complete detail drawings

A JUNIOR DRAFTSMAN SHOULD

- Be at least 18 years old
- Be a high school graduate or have a GED
- Have good eyesight
- Have good eye-hand-finger coordination
- Have full use of both arms
- Do neat and precise work
- Be able to do freehand drawings
- Be good in math and enjoy tedious work

$$$ THE PAY $$$

THE HOURS

Usually **40** hours a week

Extras You MAY Get

. Paid vacations	. Pension plan
. Paid holidays	. Sick leave

. Health & Life Insurance

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To make school subjects more meaningful.

SPECIFIC BEHAVIORAL OBJECTIVE: Students will learn two techniques used by scientists in discovering identity of elements.

SUGGESTED SUBJECT AREA Science

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Kitchen chemistry "hands-on" experiment.	1. Explain to students in advance the directions in #2 and #1 in resource materials. Also, students will be responsible for bringing materials for the experiment.	1. Materials needed: tinfoil, clothespins, iodine, vinegar, candles, spoon: eye dropper, container (paper cups, e water, matches, paper plates.
2. Discuss different types of jobs associated with chemistry.	2. Directions for experiments Have students bring different substances from home such as flour, sugar instant milk, cocoa, corn starch, etc. The teacher should put the substances into separate containers and number each container. Make sure the students do not see what container the compounds are put into. Each container should have a spoon in it so the substance can be dispersed. Have the students break into groups (2 to a group is ideal). Pass out the material to each group: 1 paper plate, candle, 1 container of vinegar, 1 container of water, 1 book of matches, 1 clothespin, tinfoil, and iodine solution (mixture of water and iodine).	2. Encyclopedias
3. After the experiments have been completed, have students choose one of the powders and identify the workers involved in the processing cycle of each product.		

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
	Next, have each group get one substance from a container. The container should be set at a table so the students can have a choice. The object now is to see if the student can detect the type of powder he has through the process of elimination by experimentation. This is done by having the student taste the powder, feel for the texture of the powder, mix water, vinegar, and iodine solution to the powder. This is done by taking an eye dropper and adding water, vinegar, and iodine solution to the powder separately to see what happens to the powder. The last step of experimentation is to heat the powder. Tinfoil is used to form a basin for holding the powder. Do this by shaping the tinfoil into a cup-shape container (U) and use the clothespin as a handle to the container. The candle will serve as the source of heat. Students are to record what happens to the powder during each phase of experimenting and record it on the sheet provided. When this is done, they record this "guess" as to what the powder is. Do this to all the powders until they have been tested by each group.	

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
	After all the powders have been tested, the teacher then goes over the results of what happened to the powder during each phase of the experiment. Then give the answers to each powder. To add more of a challenge to the powders, the teacher may mix powders to form an "X" compound. The student will then have to pick out the various powders in each "X" compound.	

NUMBER	VINEGAR	IODINE SOLUTION	WATER	TASTE	TEXTURE	HEAT ELEMENT	YOUR GUESS

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To help develop the basic understanding of electricity and how it applies to the world of work.

SPECIFIC BEHAVIORAL OBJECTIVE: After completion of the electrical unit, each student will be able to list 5 occupations that result from the direct or indirect use of electricity.

SUGGESTED SUBJECT AREA Science

SUGGESTED GRADE LEVEL 5

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
A. Discuss the various types of electricity. B. Discuss all types of jobs dealing with electricity. C. Use filmstrips dealing with electricity. (Can be gotten from central filmstrip supply.)	Each student or group of students should be given an electrical package made up of one D. C. flashlight battery copper wire, flashlight bulb, and bulb holder. Then hand out worksheets dealing with different areas of electricity. The worksheets are attached to the unit.	A. Go over the worksheets with the students. B. Re-explain different terms in electricity. C. Talk about different occupations dealing with electricity. D. Have students choose which occupation dealing with electricity they would like to have for a future occupation. Then have each of the students do research and a report about the occupation they choose. E. Try to get resource people from various fields to talk to the class.

SUGGESTED CORRELATION FOR THIS ACTIVITY:

How many different ways can you devise to make a bulb light using only one battery, one bulb, and one piece of wire?

1. Make sketches of the various connections and explain how you did each step.

Make as many connections as you can by using a battery, a bulb, and two pieces of wire.

1. Make sketches of the various connections and explain how you did each step.

35b

FOLLOW-UP ACTIVITIES

Try each of the following activities and explain what happened in each experiment.

1. Use two or more batteries, light the bulb and show how you did this by making sketches of your connections.
2. How many batteries can be lighted with one battery?
3. Can the bulb be lighted on the other end of the battery?
4. How many ways did you find to make the bulb light?
5. Does the bulb have to touch the battery before it will light?
6. What special places must be touched on the bulb for it to light?
7. What special places must be touched on the battery for the bulb to light?

What is your theory about lighting the bulb?

Answer the following questions as complete as possible. Draw complete diagrams for the questions if possible.

1. Try to light a bulb in a bulb holder.
2. Can you light the bulb by using a battery, a bulb holder and one wire?

3. Can you light the bulb by using a battery, a bulb holder, and two pieces of wire?

4. Attach the bulb holder to the battery--try to connect another circuit to the bulb holder to see if you can light two bulbs.

5. Cross the two wires on the bulb holder when the bulb is lit. Explain what happens.

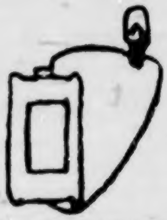
6. Make as many circuits as you can. Draw a sketch of each complete circuit.

TEST CARD 2

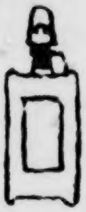
TEST CARD 2

Put an x in the arrangements that will light the bulb.

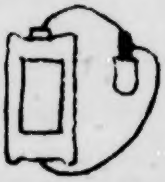
1 ___



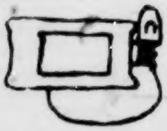
2 ___



3 ___



4 ___



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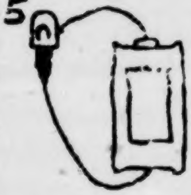

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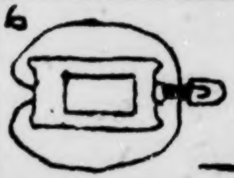

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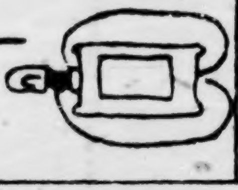
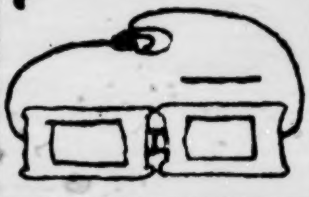
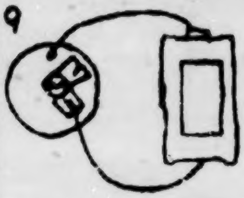


8 ___



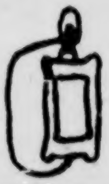
9 ___



PREDICTION SHEET 1

Will the bulb light? If you are not sure, try it and see.

1



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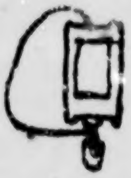

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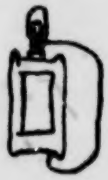

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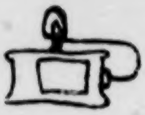

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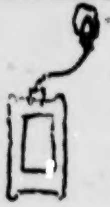

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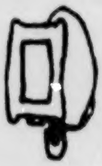

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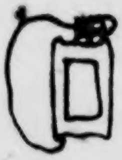

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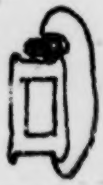

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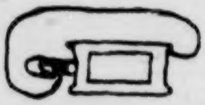

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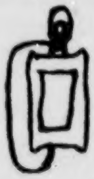
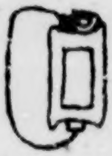
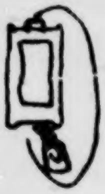






CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To provide more specific Observational Experience about the World of Work.

SPECIFIC BEHAVIORAL OBJECTIVE: Students will become aware of the nutritional value of their eating habits by charting everything they eat for five days. At the end of the activity each child will list three occupations related to food service.

SUGGESTED SUBJECT AREA Science

SUGGESTED GRADE LEVEL 5

ACTIVITY

Children will be exposed to necessary information and conduct two experiments. This will develop the concept that a calorie is a unit of heat.

Through discussion and recording on a calorie consumption chart (attached page) youngsters will become aware of the importance of a balanced, non-excessive diet to a productive worker. Discuss workers involved in the food servi service area.

SUGGESTED TECHNIQUE

1. As a language arts project, teachers may assign students to write letters requesting free pamphlets, posters, etc. Sources for this information are listed in the Resource Materials section. These free materials will assist students in completing techniques 5,6 and 7.
2. Read and discuss section one of 36c. Emphasize that a calorie is the amount of heat needed to raise one gram of water through one degree centigrade.
3. Conduct the experiment as described in section two of 36c. Upon completion of the experiment discuss the meaning of small calorie and large calorie as describes in section three.
4. Conduct the experiment as described in section four of 36c. Upon completion of the experiment discuss the magnitude of a large calorie.

(Continued)

RESOURCE MATERIALS

Films: 1587 The Food Store, Color 13mi
2667 Taking Care of Myself color

Book: Todays Basic Science, Harper & Row, 1967

Publications
"Foodway to Follow" PM-19
"The Food Mobile" PM-21
may be obtained by writing:
North Dakota State Wheat Commission
P. O. Box 956 Bismarck, ND

"Careers For Youth in the Food Service Industry" may be obtained by writing:
Director of Education
National Restaurant Association
1530 North Lake Shore Drive
Chicago, Ill 60610

For a wide variety of excellent teaching materials about nutrition write to:
National Dairy Council
111 N. Canal Street
Chicago, Il 60606

continued

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
	4. continued The information in section five may be helpful.	Other sources include: American Dietetic Association 620N. Michigan Ave. Chicago, Il 60611
	5. Have each youngster construct a chart to record his calorie consumption in five days (see The food recorded on this chart may then be analyzed for nutritional value. (Stress the importance of recording all snacks including candy, pop, gum, etc.,) Discuss the different amounts of calories needed according to age, activity climate, etc.)	National Livestock and Meat Board 36 S. Wabash Ave., Chicago, Il 60603 Pamphlet: "Choose Your Calories Wisely Dept of Home Economics Service Kellogg Company Battle Creek, Michigan.
	6. Discuss the importance of a balanced non-excessive diet. Mentionable items may include: beriberi; pellagra scurvy; rickets; skin disease; weak bones and teeth, etc. List occupations that must be especially aware of nutritional diets.	Films available through the division of Health Education, N. D. Dept. of Health, Bismarck, ND 58501 Big Dinner Table, The Better Breakfasts, USA Color of Health, The Eat for Health Four Food Groups Its All in Knowing How Milk To Grow On Planning for Good Eating Something You Didn't Eat Whats Good to Eat
	7. Invite the school cook or another person in the food service field to hold a "news conference" in your classroom. The children should have questions prepared in advance for the visitor.	Filmstrips available at same address "Better Breakfasts, USA " "Food We Eat, The""Whats in OUr Food" "Skimpy and Good Breakfast" "Why Eat a Good Breakfast" "Your Daily Bread"

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
		Filmstrips available through the Divisi of Maternal and Child Care, North Dakot State Dept of Health, Bismarck, ND 5850 "Breakfast and the Bright Life" (record "Alexanders Breakfast Secret" (record "Project A. M. - Today's Breakfast and Cereal" (record) "Food Through the Ages" (record) "Food Store, The" "Getting Food Ready For Market" "Kinds of Food" "Winning Combination"

Reproduced from Today's Basic Science, John Navarra and Joseph Zafforoni, Harper and Row, Publishers, 1967 P. 31-34

SECTION ONE: Measuring Heat

Scientists have a special way of measuring heat. They use a unit of heat called the calorie. A calorie is the amount of heat needed to raise one gram of water through one degree centigrade.

The scientist uses the centigrade scale to measure temperature. The common temperature scale is the Fahrenheit scale.

The gram is the scientist's unit for measuring weight. There are about 454 grams in one pound. Or you might say there are about 28 grams in one ounce. A gram of water would be about eighteen drops from a medicine dropper.

It takes very little heat to raise the temperature of 1 gram of water. Do an experiment. You will see that the calorie unit of heat is indeed small.

SECTION TWO: Experiment

You will need: Water, test tube, medicine dropper, alcohol burner, centigrade thermometer, test-tube clamp,

Put eighteen drops of water into the test tube. Use the medicine dropper. The eighteen drops of water will equal about one gram. Meafure the temperature of the water. Use the centigrade thermometer.

Heat the water over the alcohol burner. Hold the test tube with the clamp. Be sure you have heated the water. Then measure the temperature again. How many degrees centigrade has the temperature risen? How many calories of heat were added to the water?

SECTION THREE:

The unit of heat that raises one gram of water one degree centigrade is called the small calorie. The scientist also uses a large calorie in many areas of research. There are one thousand small calories in one large calorie.

The large calorie is used to express units of heat in food. For example a slice of bread produces about 80 calories of heat in your body.

SECTION FOUR: Experiment

You will need: Water, scale, walnut, pan, cup, match, test tubes, centigrade thermometer.

Put 2+2/10 pounds of cold water into the pan. This amount of water equals 1,000 grams. Measure the temperature of the water with the centigrade thermometer.

Remove the shell from the walnut. Place the walnut under the pan. Support the pan with test tubes. Set the walnut on fire. Let the water heat. Then measure its temperature. Hour many calories of heat were added to the water?

SECTION FIVE:

One large calorie of heat is added to the 1,000 grams of water for each degree centigrade the temperature rises. One boy who did the experiment found that the temperature of his 1,000 grams of water rose 7° C. Seven calories were added to the water.

CALORIE CONSUMPTION CHART

DAYS	FOOD EATEN	CALORIES CONSUMED
MON.		
TUES.		
WED.		
THURS.		
FRI.		

TOTAL CALORIES ____________

Calorie Values of Average Servings of Some Commonly Used Foods

Milk Group

	AMOUNT	CALORIES
Milk, cow:		
Fluid		
whole	1 cup	165
skim	1 cup	90
evaporated (unsweetened)	1 cup	345
buttermilk	1 cup	90
Dried		
whole	1 tablespoon	45
nonfat (skim)	1 tablespoon	25
malted	1 ounce	115
Cheese		
cheddar	1 inch cube	70
cottage, creamed	½ cup	120
cream	1 tablespoon	55
Swiss	1 ounce	105
Ice cream, plain	⅛ quart brick	145

Meat Group

Beef cuts, cooked, lean and fat		
chuck	3 ounces	295
hamburger	3 ounces	260
rib roast	3 ounces	395
round	3 ounces	235
sirloin	3 ounces	350
Veal, cooked, lean and fat		
cutlet, broiled	3 ounces	185
chuck roast	3 ounces	210
stew meat	3 ounces	195
Lamb, cooked, lean and fat		
loin chop	3 ounces	325
shoulder roast	3 ounces	305
leg roast	3 ounces	250
Pork, fresh, cooked, lean and fat		
ham	3 ounces	340
loin or chops	3 ounces	350
Pork, cured, cooked, lean and fat		
ham, smoked	3 ounces	260
luncheon meat	2 ounces	165
Variety Meats, beef		
heart, braised	3 ounces	170
liver, fried	2 ounces	140
tongue, simmered	3 ounces	185
Chicken, cooked, flesh and skin		
broiled	3 ounces	185
fried	3 ounces	245
Turkey, cooked, flesh and skin	4 ounces	180
Eggs, hen		
hard-cooked	1	75
scrambled	1	110
Fish and Shellfish		
bluefish, baked or broiled	4 ounces	270
crabmeat, canned	3 ounces	90
haddock, fried	3 ounces	190
halibut, broiled	4 ounces	170
ocean perch, fried	3 ounces	150
oysters, raw	1 cup, meat only	200
salmon, broiled	4 ounces	175
red, canned	3 ounces	140
shrimp, canned, solids	3 ounces	70
tuna, canned, solids	3 ounces	180

	AMOUNT	CALORIES
AS ALTERNATES		
Beans, dry		
red kidney, cooked	1 cup	230
lima, cooked	1 cup	315
Nuts		
almonds, shelled	¼ cup	215
peanuts, shelled	¼ cup	220
pecans, shelled	¼ cup	185
walnuts, shelled	¼ cup	185
Peanut butter	1 tablespoon	90
CONCENTRATE (Kellogg's)	⅓ cup	105

(A ready-to-eat high protein nutrition concentrate with moderate vitamin and mineral fortification.)

Vegetable-Fruit Group

Those especially valuable as sources of vitamin C and vitamin A

Apricots, raw	3	55
canned with sirup	½ cup	110
Asparagus, cooked	1 cup cut	35
Broccoli, cooked	1 cup	45
Brussels sprouts, cooked	1 cup	60
Cabbage, raw, shredded	1 cup	25
Cantaloup, raw	½ small	40
Carrots, raw	1	20
cooked, diced	1 cup	45
Chard, cooked	1 cup	45
Collards, cooked	1 cup	75
Grapefruit, raw	½ medium	50
juice, canned, sweetened	½ cup	65
Guava, raw	1	60
Honeydew melon, raw	1 2-inch wedge	50
Kale, cooked	1 cup	70
Kohlrabi, cooked	1 cup	60
Mango, raw	1 medium	85
Mustard greens, cooked	1 cup	55
Oranges	1 medium	70
juice, fresh	½ cup	55
Papayas, raw	1 cup ½-inch cubes	70
Peppers, green	1 medium	20
Persimmon, raw	1 medium	75
Potato, white, cooked, unpeeled	1 medium	95
sweet, cooked, peeled	1 medium	170
Pumpkin, canned	½ cup	40
Spinach, cooked	1 cup	45
Squash, winter, cooked	1 cup	95
Strawberries, raw	1 cup	55
Tangerines	1 medium	40
juice	½ cup	50
Tomatoes, raw	1 medium	30
canned	1 cup	45
juice, canned	½ cup	25
Turnip greens, cooked	1 cup	45
Watermelon, 4"x8" wedge	1 wedge	120

Other Fruits

Most fruits eaten raw, or prepared with little added sugar, provide about 100 calories for the average serving.

Other Vegetables

An average serving of most vegetables, unless served with added butter or rich sauce, will provide less than 100 calories.

Cereal-Bread Group

Whole-grain, enriched, restored and fortified foods in this group furnish worthwhile amounts of protein, iron, several of the B-vitamins and food energy.

	AMOUNT	CALORIES
Cereals, ready-to-eat, low in fat		
Concentrate (Kellogg's)	⅓ cup	105
Special K	1 cup	70
Corn Flakes	1 cup	75
Rice Krispies	1 cup	105
OKs	1 cup	80
All-Bran, or Bran Buds	½ cup	100
40% Bran Flakes	¾ cup	105
Raisin Bran	⅔ cup	100
Pep Wheat Flakes	1 cup	105
Shredded Wheat (Kellogg's)	1 biscuit	85
Krumbles	¾ cup	105
Cereal, to-be-cooked		
corn grits, cooked	1 cup	120
corn meal, cooked	1 cup	120
farina, cooked	1 cup	105
oatmeal, cooked	1 cup	150
rice, cooked	1 cup	200
wheat, whole meal, cooked	1 cup	175
Breads		
cracked wheat	1 slice	60
raisin	1 slice	60
rye	1 slice	55
white	1 slice	60
whole wheat	1 slice	55
biscuits, baking powder	1 medium	130
corn muffins	1 medium	155
crackers, graham	2 medium	55
pancakes	1 medium	60
rolls, plain	1 medium	115
rye wafers	2 medium	45
tortillas	1 medium	50
Other Cereals, low in fat		
Cocoa Krispies	1 cup	110
Froot Loops	1 cup	115
Stars	1 cup	110
Sugar Frosted Flakes	¾ cup	110
Sugar Pops	1 cup	110
Sugar Smacks	1 cup	110

Other Foods

Butter	1 tablespoon	100
Fats, vegetable	1 tablespoon	110
Gelatin, dry, plain	1 tablespoon	35
Lard	1 tablespoon	135
Macaroni, cooked	1 cup	155
baked with cheese	1 cup	475
Margarine	1 tablespoon	100
Noodles, cooked	1 cup	200
Oils, pure vegetable	1 tablespoon	125
Salad dressings		
Italian	1 tablespoon	80
French	1 tablespoon	60
mayonnaise	1 tablespoon	110
Soups, canned	1 cup as served	100-200
Sugar, brown or granulated	1 tablespoon	50
Tomato catsup	1 tablespoon	15
White sauce	1 tablespoon	25

APPENDIX C

FIELD TRIPS

Guidelines:

I. Set up plans:

A. Plan type of trip
Are students interested in going?
Is trip justifiable? (Can classroom provide same learning?)
Reason for taking trip:
1. Develop awareness of different workers
2. Helping them observe working conditions
3. Awareness of interdependence of workers.

B. Preparation

1. Permission from principal
2. Plans for transportation
3. Permission slips
   Develop form-sheet for the tour of business place
4. Contact business tour establishment

   a. Permission to come and definite date and time
   b. Information given them
      1. Number of children
      2. Age and grade level
      3. What material covered by children previously
      4. Questions they might ask
      5. Workers children may question
      6. Do you have materials you would like us to go over beforehand or hand out on tour?
      7. Safety measures to be observed

C. Pupil Teacher Preparation

Watch for:
1. Working condition
2. Training of workers
3. Duties of workers
4. Clothes they wear - appropriate
5. Numbers of workers
6. Safety
7. Do they like this work?

Our preparation for trip:
1. Appropriate clothing
2. Safety - conduct on tour
3. Courtesy (going and at tour base)
4. Departure time

D. Follow-up

1. Did you enjoy the trip and would you recommend trip to others? Why? Why not?
2. Discuss observations (C)
3. Were all your questions answered?
4. Which of these workers would you like to be?
5. What did you learn on this trip that you didn't learn in classroom?

PRELIMINARY LETTER TO FIELD TRIP HOST

Dear ______________________

On ______________________ our class will be visiting your plant. We are very interested in the type of work that you and your associates do and the functions of machines that assist you. Below are listed some areas that we are interested in:

1. Titles of occupations at your plant.
2. Duties of the workers.
3. Training or preparation needed.
4. Salaries (optional) beginning and ten year average.
5. Physical and social characteristics needed.
6. What school work was most helpful for your job.

Children often hear the importance of punctuality, responsibility, cheerfulness and reliability from their parents and teachers. They often are deeply impressed when they hear a field trip host relate the importance of these four traits to their occupation.

We appreciate your cooperation and willingness to provide a learning experience for our youngsters.

Sincerely yours,

______________________ Teacher

______________________ Elementary School

*Note: In Bismarck, John Wanser has made the contact and delivered this information.

STUDENT EVALUATION OF FIELD TRIP

1. Did you enjoy the trip and would you recommend the trip to others? Why?

2. Discuss the most interesting thing that you observed on the field trip.

3. Do you have any questions that were not answered on the field trip?

4. Which of these workers would you like to be? Why?

5. What did you learn on this trip that you didn't learn in a classroom?

6. What talents or skills do you have that may apply to this occupation?

7. Suggestion: Write a letter of appreciation to the manager of the plant you visited.

Grades 4 - 5 - 6

Ideas for Employers Regarding things to Cover During Occupational Field Trip

1. Title of occupations at your plant
2. Duties of the workers
3. Training or preparation needed
4. Salaries (optional) beginning and ten year average
5. Physical and social characteristics needed.
6. What school work was most helpful for your job

RESOURCE PEOPLE GUIDELINES

Preparation:

1. Make the initial contact.

2. Teacher should obtain background information on person so she can make the introduction.

3. Provide information to the speaker describing the type and number of students, the program, facilities and equipment you can provide, things to cover, etc. (letter for this purpose attached) Form xx

4. Cover the area concerning the resource person before he or she comes to the classroom.

5. Give students some general knowledge of this person's field.

6. Talk about questions that they wish to have answered. (general) Have these organized so that all questions can be asked without repetition.

7. Have the resource person ask students, "What do you think I do?", before he begins his actual presentation.

8. If question period lags the teacher should ask questions to bring out things that haven't been covered thus far.

Form xx

Dear ______________________

My students are studying ____.
We would like to have some first hand knowledge about this area. We are very interested in the work that you do at your job. Below are listed some areas that we would like to have included in your talk to the class.

1. Title of job
2. Duties
3. Training or preparation required.
4. Approximate starting salary - salary after ten years (average). Optional
5. Have you been doing this same type of work all of your working life.
6. Demand for such a job.
7. Supply of workers for this occupation.
8. Physical characteristics needed.
9. Social Characteristics needed.
10. Do you work alone or with others.
11. Do you need to get along and cooperate with other workers.
12. What school courses helped a great deal in preparing you for this work?
13. How do you feel after a days work? Why?
14. What are the good and bad points about it?
15. How and where training can be obtained.
16. Leave plenty of time for questions.

Listed below is some information you may find useful.

Grade _________
Number of students _________
Description of facilities and equipment available ______________________________
____
____

Thank you very much for consenting to spend some time with our class.

Sincerely yours,

Teacher

FOLLOW-UP

1. Discuss things they learned from visit (what do they know now about this job that they did not know in the past).

2. Discuss:

    a. Is this person's work useful? How?

    b. Would you like this type of work?

    c. What characteristics do you have that would be valuable in this work?

    d. What must you improve on if you were to go into this line of work?

APPENDIX E

INTERVIEWING GUIDELINE

Intermediate Grades

PURPOSE

We see the purpose of an interview to be an accurate personal way to obtain information. A famous social scientist, Gordon Allport, once said, "If we want to know how people feel, what they experience and what they remember, what their emotions and motives are like, and the reasons for acting as they do - why not ask them."

Interviewing can be used as an effective way for students to gain insight into a wide variety of jobs and workers.

METHOD AND TECHNIQUES

The following rules, which also apply to professional interviewers, generally should be followed by children.

1. The purpose of the interview, or some orientation to the interview, should be given at the start.

2. The interviewer should be friendly. He should seek to elicit and maintain the cooperation of the respondent.

3. The questions should be asked exactly as stated, and usually in the order given.

4. The responses should be reported as given. The interviewer should not show that he either agrees or disagrees with the answers. (It might be a good idea to have interview teams of two for each interview - one person to ask the questions and probe for the answers, the other to record what is being said.)

5. The interviewer should prompt or probe for some answers. This should be done especially when the answer is not clear, when it is very brief, or when the respondent is reluctant to answer. This is especially important.

PREPARATION FOR INTERVIEWING

1. Students should be aware of the purpose of the interview and also what the information will be used for.

2. Students should know who they will interview and contact that person for permission before the actual interview.

3. Role-playing should be used in the classroom as practice sessions.

4. Survey possibilities for interview in your community through the yellow pages.

5. Teachers should be aware and make students aware that misinformation may result from an interview. The worker may misunderstand the question, or he may not have enough detailed information that the student is seeking.

QUESTIONNAIRE

Person Interviewed ______________________________

Person Interviewing ______________________________

Date ______________________________

I. Name of Occupation

General ______________________________

Specific Name ______________________________

II. Information About A Job

1. What are the different types of workers found in your plant?

2. What kind of work do the majority of employees do?

3. Is the work outdoors or indoors?

4. What are your job duties?

5. What are the educational and experience requirements for your job?

6. What are the physical requirements?

7. What is possible weekly or monthly earnings? (Don't force this if they don't want to tell you.)

8. What are the future opportunities?

"Buy North Dakota Products"

APPENDIX F

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To make school subjects more meaningful

SPECIFIC BEHAVIORAL OBJECTIVE: After completion of job role student will be able to perform five duties of particular worker.

SUGGESTED SUBJECT AREA physical Education

SUGGESTED GRADE LEVEL 4-6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Continuing Career Exploration Activities. These activities are to be carried on in the yearly program. a- student officials, umpires or referees. b- Equipment managers c- professional athlete	A. The teacher could choose these officials by student volunteering. Trying to give all students a chance to participate, given the students a chance to understand the duties and stresses of an official.	A. Official Pinnies whistles
	B. A yearly schedule with two students working for a two week period. Thei job would consist of putting up and taking down equipment. The students will need extra time beside the physical education class period to do their listed duties.	B. Blackboard or bulletin board.
	C. For each specific unit a boy and girl will be awarded a professional athlete award by the teacher or a student vote. No student will win the award more than twice.	C. Paper written award or a ribbon award

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop a positive attitude toward work and the preparation for work.

SPECIFIC BEHAVIORAL OBJECTIVE: During the activity each student will have an opportunity to share information about an occupation with other students.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4-6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Jump rope of occupation A jumpdown with the missing jump coorelating with the last occupation listed.	A. A simply jump down with the teacher or chosen student reading the list of occupations. When a child misses a jump the last occupation heard is the child's occupation for that moment. B. Since there was two lists of occupations only half the class was active at a time. Although there is a boys and girls list, the groups were not divided sexually C. After one jump down was completed the children could discuss their occupation while the second group was jumping. D. Different types of jumpdowns can be used to vary the activity. E. The last child to miss should be given the opportunity to tell about the occupation they missed on and if they would like that type of work or not.	Occupational Dictionary jump ropes.

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop a positive attitude toward work and the preparation for work.

SPECIFIC BEHAVIORAL OBJECTIVE: After completion of the activity student will be able to list three workers that are involved in the insurance business.

SUGGESTED SUBJECT AREA Physical Education

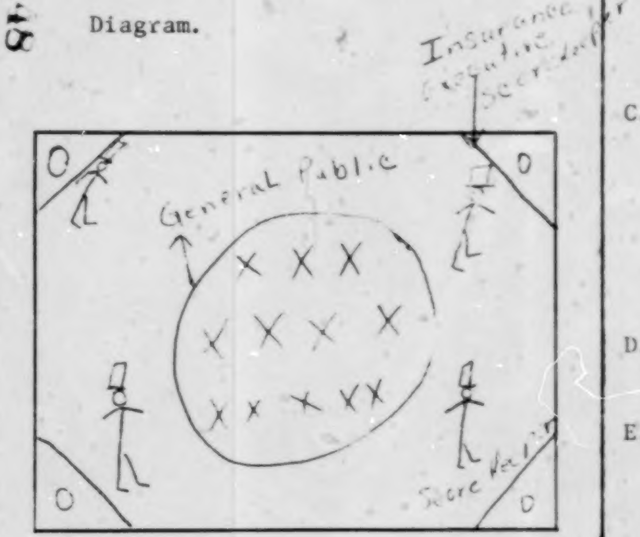
SUGGESTED GRADE LEVEL 4-6

ACTIVITY

Insurance Companies

A game of dodgeball involving insurance terms.

Diagram.



SUGGESTED TECHNIQUE

A. Discussion of what an insurance policy is.

B. Four salesmen and four insurance executives are chosen each to represent a company. If there are less than thirty children involved use two companies. The rest of the class is the general public.

C. A game of dodge ball is played with the salesman trying to hit a public. Each public has a card with a policy amount on it which only that individual public knows. It maybe very big or small. When the individual is thrown out he gives his policy to the executive.

D. When the player is hit he becomes the salesman and the past salesman becomes a retriever for his company

E. After the last person is out all the scores for each company are totaled. The company with the highest total of the amount of policies is the winner which might be the company with fewer policy holders. The principle of commission should be brought up at this time.

(continued)

RESOURCE MATERIALS

A. An example of insurance policy

B. 2 or 4 10" playground balls

C. Insurance policy amounts on cards.

D. Scorekeeper scoresheets

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
	F. This game could easily be adapted to an outdoor field by making it a tag game instead of a throwing game.	

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop and foster a positive attitude.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student will be able to list four occupations in the railroad industry.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4-6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Socio-drama to "I've Ben Working on the Railroad" The children are given a chance to act out creative dance, or rhythm to the song"I've been Working on the Railroad."	A. An introduction to this activity shoul be a short discussion of the different jobs available in the industry of railroads and the vastness and importance of the industry. B. The class is divided into groups of five or six and given the assignment to act out the first verse of the tune using movement and sounds but no direct verbalizing. C. The teacher should introduce some probable movements and then let the children create giving a certain time limit. D. The performances will be watched by the part of class not performing. E. This creative activity could be used with other songs stressing the work factor.	Other songs: "Farmer in the Dell" "Wabash Cannonball" "Row-Row Your Boat" "15 mules on the Erie Canal" "16 tons and What do You Get"

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To impress upon the student that a healthy body is essential to a productive worker.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student will be able to demonstrate the proper way to perform each of the six functions listed below.

SUGGESTED SUBJECT AREA Physical Educ.

SUGGESTED GRADE LEVEL 4-6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Warm up of basic skills in work use as part of exercise class or warmup. 1. Basic standing 2. Basic walking 3. Sitting properly 4. Bending properly 5. Lifting efficiently 6. Reaching properly	Discuss proper methods of 1-6 and why the body functions better using the proper methods. Body grows to the posture you normally take.	Movement Fundamentals Janet A. Wessel Prentice-Hall Englewood Cliffs, N.Y. Place pictures of correct and incorrect posture on bulletin board.

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop a positive attitude toward work and the preparation for work.

SPECIFIC BEHAVIORAL OBJECTIVE: Students will be able to list advantage and disadvantage of working for a salary and same for receiving a welfare check.

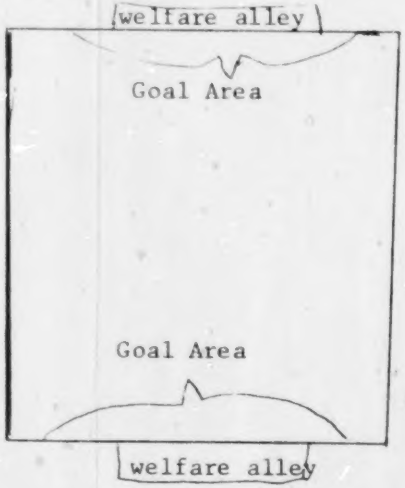
SUGGESTED SUBJECT AREA Physical Educ.

SUGGESTED GRADE LEVEL 4-6

ACTIVITY

Welfare Alley

This is an adaption of the game of prisoners base. The terms have been changed, but the game is played exactly the same.



SUGGESTED TECHNIQUE

During calisthenics discuss working for a salary and receiving welfare payments advantages and disadvantages of each.

A. Should use out of doors playing field because of the running in the game.

B. The basic rule of the game is that any player may be only by an opponent who has left his goal area after the player who is tagged. Each player trip to tag an opponent to make him a welfare receiver.

C. If caught the player must go to welfare alley and stay until he is rescued by another team mate. If ther is more than one welfare recipient they form a chain from welfare alley.

D. To win the game, a team must have one of its players enter the opponent's goal area without being tagged, or, one team must have a certain amount of opponents on welfare.

RESOURCE MATERIALS

Field workers for side lines, goals and welfare alley.

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To present appropriate occupational information using a broad introduction of occupations throughout the world.

SPECIFIC BEHAVIORAL OBJECTIVE: After completion of the activity each student will be able to relate at least one occupation that has been acted out entails.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4-6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Work charades A game of acting out occupation to a specific time limit.	A. Divide the class into 5 equal groups. B. Have each child choose a job card and keep that job a secret. C. At the sound of a whistle a specified child in each group has thirty seconds to act out the occupation. D. If the group guesses the occupation in the time limit a point is given. E. The group with the greatest amount of points is the winner. F. The occupation should be easily acted out physically but difficult enough to make the game challenging. G. This activity could be used in conjunction with jump rope of occupations. A jump down instead of job cards would be a way of assigning occupations to be acted out in the charade.	Job cards Stop watch Score sheets

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop skills basic to living a full and meaningful life.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student will demonstrate the relation of hand-eye coordination in relay form as it would apply to the world of work.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4-6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Relay of hand manipulation	A. *Discuss what hand-eye coordination is and that some people have high hand-eye coordination making them ready for certain jobs. Tying square knots Threading needle arrange bowling pins balance two dowels B. Divide class into equal squads and place them at one end of a gym. C. Try each activity before each relay. 1. Demonstrate tying knot 2. Thread a needle 3. Arranging pins in bowling formation or any formation desired - have marks on floor where pins must be placed. 4. balance one dowel on top on another which is flat on the floor D. Have student run to end of gym - complete stunt - run back and sit at end of squad. E. Teacher should okay each students activity before he returns to squad.	Jumping ropes (one for each squad) Large darning needle and thread (one for each squad.) Plastic bowling pins, wooden Indian clubs or any group of objects that must be set on end in a desired formation. Wooden dowels (two for each squad)

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
	Any number of activities of hand-eye coordination could be developed by creative thinking of instructor. * Relays involving skills which take high hand eye coordinations.	

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop and foster a positive attitude toward the value of fine arts.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student will show that he understands the value of fine arts to the world of work by listing one way that dancing helps the individual.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4 - 6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Rhythms:	Tell how each specific dance relates to the world of work.	
1. Farmer in the Wheat		1. Victor 2168 or 45-5066 Folkraft 1182
2. Farmer Grey		2. Epic LN 3607
3. Shoemaker's Dance		3. Victor 45-6171 or 20450
4. Grapevine Mixer		4. Osborne
5. Speed the Plow		5. Folkraft F1087B
6. Dive for the Oyster		6. Folkraft 1018 "Old Joe Clark"
7. Cotton Pickin Polka		7. Victor 45-8951
8. Haymaker Jig		8. Folk Dancer MN10504
		Dance A While, Harris, Pittman Walker 1968 Burgess Pub. Co. Minn. MN

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To present appropriate occupational information using a broad introduction of occupations throughout the world.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student involved will be able to state the purpose of the YMCA and its value throughout the country.

SUGGESTED SUBJECT AREA Physical Educatio

SUGGESTED GRADE LEVEL 4-6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Intramural YMCA field trip with a swimming party after a tour of the facility.	Arrange field trip through school and YMCA administration. Arrange transportation. Have tour of facilities as basis of field trip with tour leader knowledgeabl in relating the occupations of Y workers, both paid and volunteer, to the students. Also the leader should make aware how the Y is one of the best avenues to adult leisure time activities. After tour a swimming party could be the treat given to the children.	

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To give students an opportunity to express goals and aspirations.

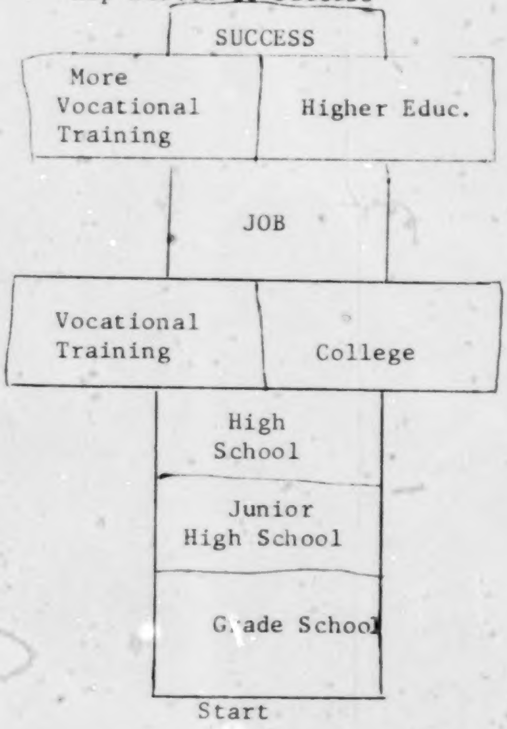
SPECIFIC BEHAVIORAL OBJECTIVE: After completion of activity student will be able to state what he thinks his goal in life will be at this time.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4-6

ACTIVITY

Hop scotch to success



SUGGESTED TECHNIQUE

a. An explanation of the hopscoth should be given explaining the ladder of education on the chalkboard at the beginning of class.

b. The child chooses either of the double blocks to simulate one type of training with equal opportunity to accomplish either.

c. Teams are arranged with three people on each hopscotch.

d. Each student chooses a rock.

e. The general rules of hopscotch were followed the child threw a rock to the 1st blook hops over it and continues on with 1 foot on each block until a line is stepped on or a throw to a block is missed. When this occurs the rock stays on the block where it was when the error was committed, the player goes to the end of the line and the next player takes his turn not being able to step on a block with a rock on it. The child to 1st pass success is the winner.

RESOURCE MATERIALS

Dynamic Physical Education for Elementary School Children,
Victor P. Dauer
Burgess Publishing Co.
Minneapolis, MN page 505

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: Develop skills basic to living a full and meaningful life.

SPECIFIC BEHAVIORAL OBJECTIVE: After completion of the activity each student will realize which pscho-motor skill he is the most adapt at and tell one worker to whom this skill is very important.

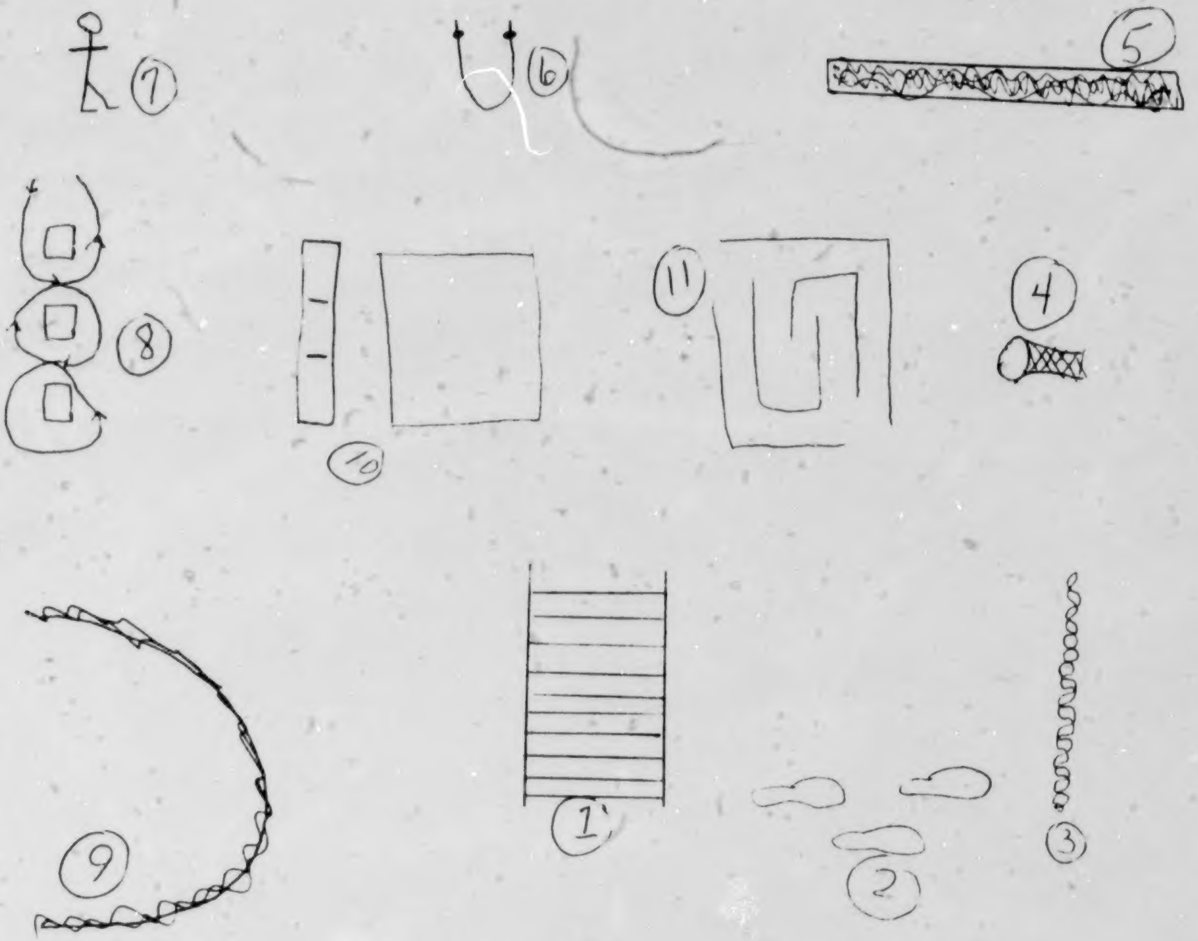
SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4-6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Obstacle course An obstacle course where different skills are assigned to different occupations. A record is kept by students to show which jobs he accomplished on the course.	A. Each obstacle is labeled for a certain job relating physical activity with a skill the job would demand. B. The children are numerically assigned to start at different stations. C. A cue given by teacher would mean change to the next higher numbered station. D. Score or evaluation will be determined by the child having a diagram of the course and checking off the obstacles completed. E. The basic obstacle course should be altered to the availability of equipment. F. The president's physical fitness obstacle course could also be used as a activity by stessing?	Horizontal ladder two climbing ropes basketall hoop and basketball Balance Beam Jump ropes three chairs vaulting horse 6 folding mats. Diagram of obstacle course on attached sheet.

SUGGESTED CORRELATION FOR THIS ACTIVITY:

OBSTACLE COURSE



1.	Horizontal Ladder (up and down twice)	Painter
2.	Gym Walk Around (3 times)	Mailman
3.	Climb the Rope to the tope of the gym	Telephone Repairman
4.	Make a Basket (once)	Basketball coach
5.	Walk a Balance Beam with hands behind back	Carpenter
6.	50 double rope jumps with no miss	Professional Boxer
7.	15 - sixcount burpees	Housewife
8.	3 chair agihity? drill	Dancer
9.	Tarzan Rope Swing	Movie stunt man
10.	Jump & Roll from vaulting horse	Parachutte Jumper
11.	Mat Maze	Adaptability of any occupation

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop skills basic to living a full and meaningful life.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student will demonstrate the relation of hand-eye coordination in relay form as it would apply to the world of work.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4 - 6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Relay of hand manipulation, a. discuss what hand-eye coordination is and that some people have high hand-eye coordination making them ready for certain jobs. b. tying square knot c. threading needle d. arrange bowling pins e. balance two dowels Any number of activities of hand-eye coordination could be developed by creative thinking of instructor.	A. Divide class into equal squads and place them at one end of gym. B. Try each activity before each relay. 1. demonstrate tying square knot 2. threading a needle 3. arranging pins in bowling formation or any formation desired - have marks on floor where pins must be placed. 4. balance one dowel on top on another which is flat on the floor C. Have student run to end of gym - complete stunt - run back and sit at end of squad. D. Teacher should okay each students activity before he returns to squad.	Jumping ropes (one for each squad) Large darning needle and thread (one for each squad) Plastic bowling pins, wooden Indian clubs or any group of objects that must be set on end in a desired formation. Wooden dowels (two for each squad).

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop and foster a positive attitude toward the value of fine arts.

SPECIFIC BEHAVIORAL OBJECTIVE: Dance is a vigorous activity which used as a leisure activity will mentally and socially prepare a worker for work. Folk dance often tells of the work of countries and gives ideas of their life style.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4 - 6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
RHYTHMS: 1. Farmer in the Wheat 2. Farmer Grey 3. Shoemaker's Dance 4. Grapevine Mixer 5. Speed the Plow 6. Dive for the Oyster 7. Cotton Pickin Polka 8. Haymaker Jig 9. Tinickling	Tell how each specific dance relates to the world of work	1. Victor 2168 or 45-5066 2. Folkraft 1182 3. Victor 45-6171 or 20450 4. Osborne 5. Folkraft F1087B 6. Folkraft 1018 "Old Joe Clark" 7. Victor 45-8951 8. Folk Dancer MH1504 9. *Let's Dance*, Pittman

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To impress upon the student that a healthy body is essential to a productive worker.

SPECIFIC BEHAVIORAL OBJECTIVE: The body should be used in the best position for work efficiency.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4 - 6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Warmup or exercise part of class period. 1. basic standing 2. basic walking 3. sitting properly 4. bending properly 5. lifting efficiently 6. reaching properly	Explain the proper methods and why the body functions better using the proper methods. Discuss: Body grows to the posture you normally take.	Human Movement (book) Place pictures of correct and incorrect posture on bulletin board.

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To present appropriate occupational information using a broad introduction of occupations throughout the world.

SPECIFIC BEHAVIORAL OBJECTIVE: Exploring work movement by using child's knowledge and creativity of family or friend's work to a conscious level through suggestion.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4 - 6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Exploration of work by exploring father's, mother's, or an acquaintance's occupation. Answers to instructors questions are physically acted out by student.	Instructor has child go to their own special area in gym. Instructor asks children to choose the work of father, mother or someone they know. Instructor then asks the children to physically act out the answers to the question he will ask in any way they wish with each student staying in his own area. Question Suggestions: 1. What type of big physical movement does the occupation involve? 2. Can you think of a movement he makes without moving his feet? 3. By what means of transportation does the worker get to work? 4. If the worker runs a machine, show how. 5. Can you show five (5) things the worker does at work in one day? 6. What is your emotion to the job; boring, exciting, pleasureful, rewarding, etc.?	Exploration of Movement, Hackett N. Dak. Elementary Course of Study Creative thinking by the instructor

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CONTINUATION ACTIVITY SHEET

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
	7. What leisure time activity (after work) would you most like to participate in after working on this job all day?	

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop varied and wide interests that will open up expanded basis for vocational choice.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student will demonstrate understanding of competition in securing a job by running for block of wood which is symbol of occupation sought by five others.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4 - 6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Parachute Play	a. discuss jobs in big group. b. number off students into six different groups.	*Elementary Physical Education Course of Study*, page 200
Occupations of Physical Education	c. each group chooses an occupation and gives it to teacher.	Careers in Physical Education (posters) J. Weston Walch, Portland, Maine 04104
The resource poster book should be used with pictures and explanation of the different physical education opportunities.	d. all students go around opened chute in mixed numbers. e. a mushroom is formed.	Parachute
The parachute is used to make a mushroom and each group competes for the job by capturing the block of wood.	f. at signal an occupation is called. g. the children of a group run for block. h. winners become that occupation and are asked to bring a picture or drawing of the job to be placed on bulletin board with name of student.	Object to grab such as block of wood with "Hired" written on it.

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To present appropriate occupational information using a broad introduction of occupations throughout the world.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student should be made aware through a field trip of the occupation of operating a bowling alley.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4 - 6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Teaching the skill of bowling. Relate this activity to the world of work by taking a field trip to a bowling alley.	A. Running a three to four week unit in bowling cover bowling technique and scoring. B. Arrange a time and date for field trip with school and bowling alley manager. C. The trip would involve a line of bowling and a presentation by alley manager and a behind the scene look of the bowling machines. D. Activity could be a carryover to discussion of operation of other recreational facilities eg. golf course, curling club, swimming pool, ski resort, archery range.	Commercial gymnasium bowling equipment Homemade equipment such as milk cartons and softballs. Score sheets Transportation to bowling alley Follow-up material for carryover discussion on managing other recreational facilities

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop a wide and varied interest that will open up an expanded basis for vocation choice and to develop and foster a positive attitude toward the value of fine arts.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student should relate the basic rythmic activities with the many occupations involved in dance. The need for group cooperation would also be an objective accomplished if the activity was to be successful.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4 - 6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Professional Dancers in Action (video taped)	1. Discuss dance being a complete field in itself and all the available occupations leading off from it.	Gymnastics for Women, Blanche Drury, National Press, Palto Alto, Calif. 1964 Pg. 200
A modern gymnastic unit in which a routine of balls, hoops, wands or combination is learned by girls and done to music. The performance is video taped	2. Involve class in modern gymnastics using available equipment.	Loops, wands, balls
	3. Learn basic movements and stunts and then formulate a routine to music.	Record player
	4. After performance is somewhat polished and memorized, video tape it and then show it to students.	Rythmic records (can be pop tunes)
	5. A student through very basic instruction could focus on and photograph the group with the constant aid of instructor to insert the occupation of photography.	Video tape equipment

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To present appropriate occupational information using a broad introduction of occupations throughout the world.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student involved would understand what the YMCA is and what it offers not only in Bismarck but all over the country.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4 - 6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Intramural YMCA field trip with a swimming party after a tour of the facility.	Arrange field trip through school and YMCA administration. Arrange transportation Have tour of facilities a basis of field trip with tour leader knowledgeable in relating the occupations of Y workers, both paid and volunteer, to the students. Also the leader should make aware how the Y is one of the best avenues to adult leisure time activities. After tour a swimming party could be the treat given to the children.	

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To make school subjects more meaningful.

SPECIFIC BEHAVIORAL OBJECTIVE: To involve the selected students more in the actual working of the class.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4 - 6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
Continuing career exploration activities to be carried on as a yearly activity.		
Umpires or referees	Teacher could choose or class members could choose.	
Equipment managers	This could be arranged as a yearly schedule and the pupil could be excused early from classroom to help with duties and sent back a little late to classroom.	
Professional athlete (boy and girl for each unit)	This could be chosen by students but could be a professional athlete no more than once. A yearly schedule and a list on blackboard or bulletin board.	
	A written award of achievement could be awarded.	

SUGGESTED CORRELATION FOR THIS ACTIVITY:

CAREER DEVELOPMENT ACTIVITIES

BROAD OBJECTIVE: To develop varied and wide interests toward physical education opportunities.

SPECIFIC BEHAVIORAL OBJECTIVE: Each student will demonstrate understanding of competition in securing a job by running for eraser which is symbol of occupation sought by five others.

SUGGESTED SUBJECT AREA Physical Education

SUGGESTED GRADE LEVEL 4 - 6

ACTIVITY	SUGGESTED TECHNIQUE	RESOURCE MATERIALS
1. Parachuting Game		
a. Discuss occupations	a. Steal the back	Elementary Physical Education Course of Study Page 200
b. Group chooses six occupations.	b.	Careers in Physical Education posters address:
c. Number off group around parachute	c.	Parachute
d. Make mushroom	d.	Object to grab
e. Place block of wood	e. Block of wood with words "You're Hired" on it.	Block of wood

SUGGESTED CORRELATION FOR THIS ACTIVITY:

Teacher ____________________

Grade Level ________________

EVALUATION AND FEEDBACK ON ACTIVITIES FOR YEAR 1972-73

Activity Page	Positive Comments	Negative Comments	Suggested Changes, Additions or Deletions

Teacher ____________________

Grade Level ________________

EVALUATION AND FEEDBACK ON ACTIVITIES FOR YEAR 1972-73

Activity Page	Positive Comments	Negative Comments	Suggested Changes, Additions or Deletions